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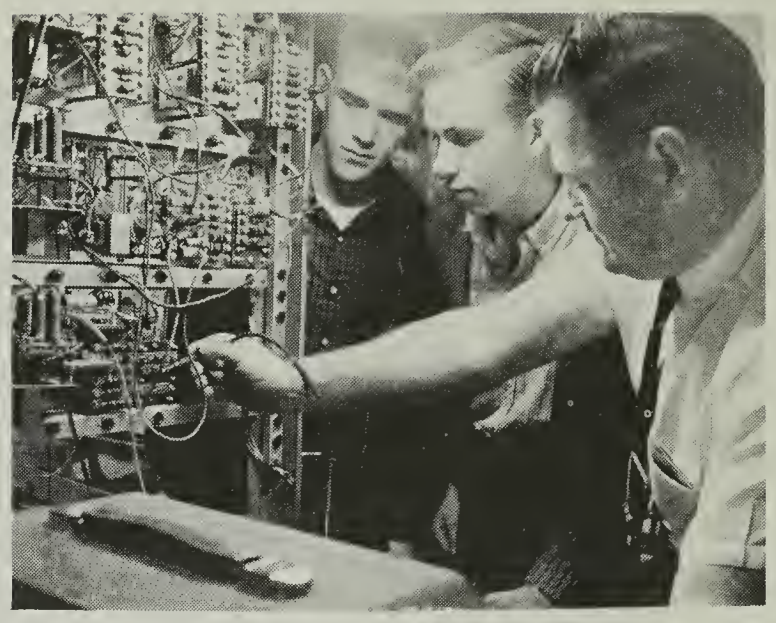
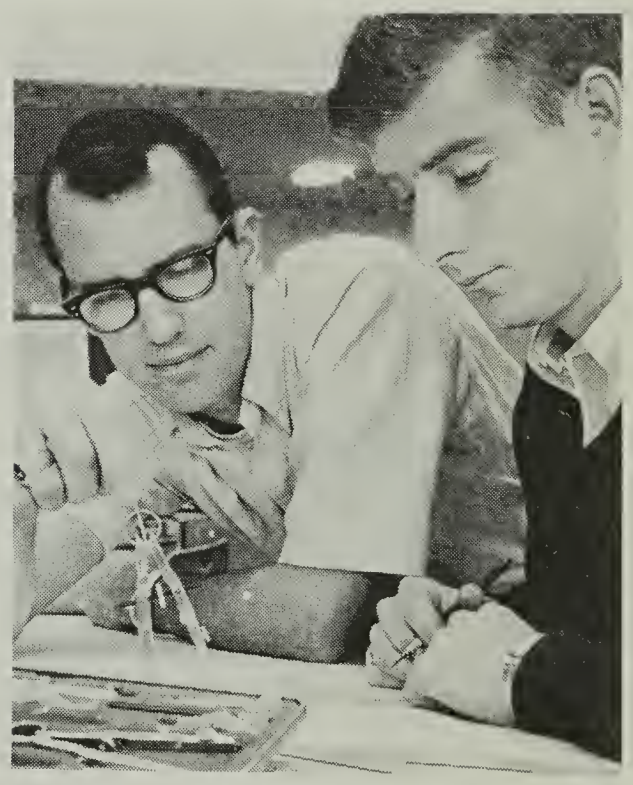
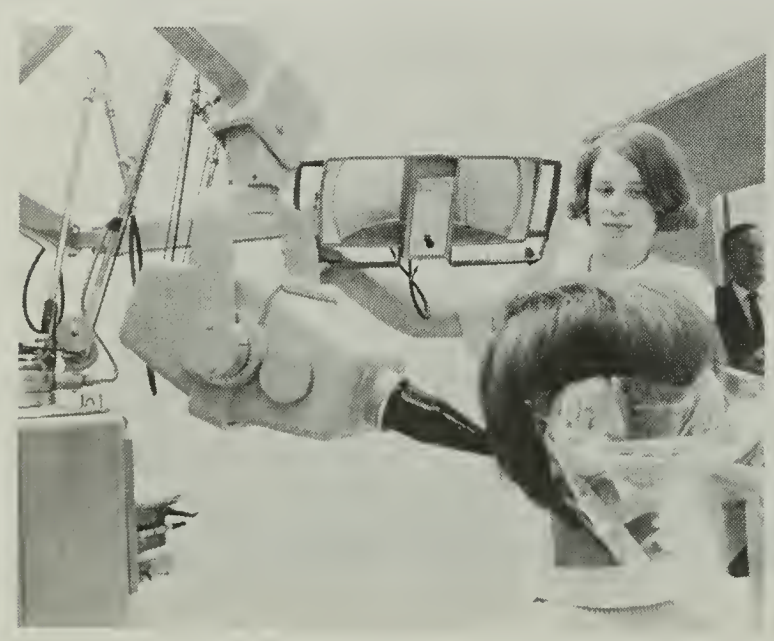
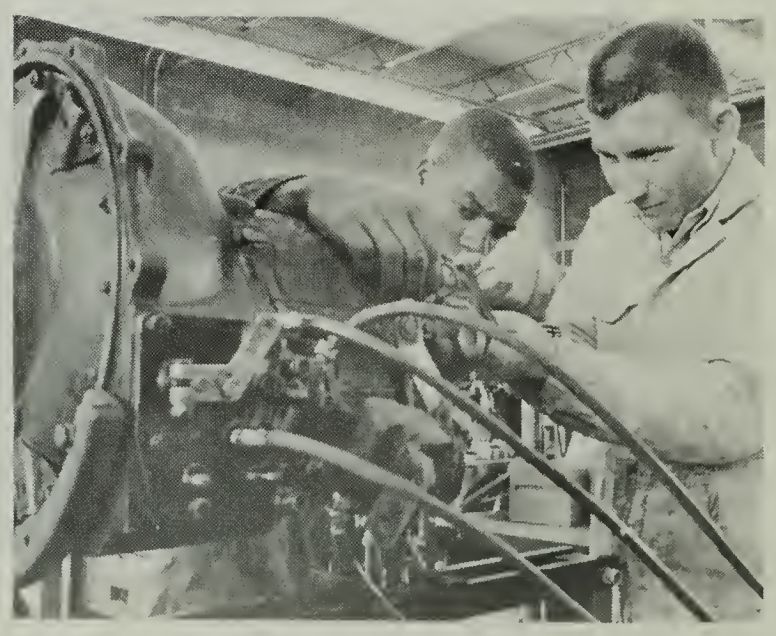
WAYNE TECH CAMPUS



A TIME FOR STUDY







WAYNE TECHNICAL INSTITUTE

Goldsboro, North Carolina

Write: POST OFFICE BOX 1259

Phone: RE 5-5151

Visit: 906 HIGHWAY 70 EAST BY-PASS

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WAYNE TECHNICAL INSTITUTE
Goldsboro, North Carolina

ACADEMIC CALENDAR
1965-1966

SUMMER QUARTER
1965

June	7	Monday—Registration
June	8	Tuesday—Classes begin
June	15	Tuesday—Last day to register, change or add courses.
July	5	Monday—Holiday
July	14	Wednesday—Last day to withdraw from a course without receiving "F"
August	24	Tuesday—Examinations—Summer Quarter Ends

FALL QUARTER
1965

September	8	Wednesday—Registration
September	9	Thursday—Classes begin
September	16	Thursday—Last day to register, change or add courses
October	14	Thursday—Last day to withdraw from a class without receiving "F"
November	24	Wednesday—Examinations—Fall Quarter Ends

WINTER QUARTER
1965-66

November	29	Monday—Registration
November	30	Tuesday—Classes begin
December	7	Tuesday—Last day to register, change or add courses
December	20	Monday—10:00 P.M.—Christmas Holidays begin
January	3	Monday—Classes resume
January	18	Tuesday—Last day to withdraw from a course without receiving "F"
February	25	Friday—Examinations—Winter Quarter Ends

SPRING QUARTER
1966

March	2	Wednesday—Registration
March	3	Thursday—Classes begin
March	11	Friday—Last day to register, change or add courses
March	31	Thursday—Last day to withdraw from a course without receiving "F"
April	7	Thursday——10:00 P.M.—Easter Holidays begin
April	12	Tuesday—Classes resume
May	20	Friday—Examinations—Spring Quarter Ends

SUMMER QUARTER
1966

June	7	Tuesday—-Registration
June	8	Wednesday—Classes begin
June	15	Wednesday—Last day to register, change or add courses
July	4	Monday—Holiday
July	14	Thursday—Last day to withdraw from a course without receiving "F"
August	24	Wednesday—Examinations—Summer Quarter Ends

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GENERAL INFORMATION

Location and Facilities of Center

The Wayne Technical Institute is located in a modern building on highway #70 East Bypass, between the William Street Exit and the Snow Hill Intersection.

The Institute is equipped with the latest and most modern equipment; all housed under one roof. Containing in excess of 21,000 square feet, the entire facility is heated and, where practical, laboratories and classrooms are air conditioned.

Extension Centers

The Wayne Technical Institute administers Extension Centers in the following locations:

1. James Sprunt Institute
   Kenansville, North Carolina
   1. Accounting
   2. Automotive Mechanics
   3. Business Administration
   4. Executive Secretary
   5. Practical Nursing
2. Carteret County Industrial Education Center
   Morehead City, North Carolina
   1. Electronics (Radio and T.V. Repair)
   2. Marine Engines (Diesel and gasoline)
   3. Marine Welding
   4. Executive Secretary
   5. Practical Nursing
3. Johnston County Extension Unit
   1. High School Program for Adults
4. Sampson County Extension Unit
   1. High School Program for Adults

Placement Service

Placement services are available to all graduates of the Institute.

There is no charge for any phase of the placement service.

Enrollment

The Wayne Technical Institute has made rapid strides on enrollment each quarter since it was founded. It is expected that this steady pattern of growth will continue in the future.

The Zodiac

The **Zodiac** is the new yearbook of the Wayne Technical Institute and its purpose is threefold.

1. To provide a lasting record and history of the Institute's growth and development.
2. To create and stimulate interests and initiative within the student body.
3. To provide memories of days gone by.

The yearbook will be compiled each year by an annual staff composed of students representing each Department. A member of the faculty will serve as advisor.

Student Government

The Student Government was organized during the Fall Quarter of 1963. Elections were held on October 22nd, 1963. Its constitution was written and adopted soon after the first officers were installed. The purpose of this organization is to promote in each student a personal sense of pride and responsibility for his or her school, County and, to accept his democratic responsibilities as an American citizen.

Counseling Service

The Wayne Technical Institute maintains a counseling and testing service, not only for the convenience of those students enrolled in the Institute's program, but for persons seeking assistance in making a wise and responsible vocational choice. A wise vocational choice is probably one of the most important decisions one can make.

These services are available, without charge.

Bookstore-Snackbar

The Wayne Technical Institute maintains, for the convenience of the student body, a combination bookstore and soda shop. Students are able to purchase needed text books, supplies and equipment. Refreshments, as well as food (milk, coffee, sandwiches, and soup) are available to the students. The Bookstore-Snackbar operates from 7:30 A.M. till 4:00 P.M.; 6:45 P.M. till 9:00 P.M. each day, Monday through Friday each Quarter during the regularly scheduled classes. When possible, the Institute assists students in off-setting some of their expenses by offering them employment in the Student Store or other departments in the Institute.

Library

The Library is housed in spacious, well-lighted quarters, with seating space for 50 readers. The book collection, which is primarily scientific and technical, consists of 5,500 volumes. New books are being added continually. Among these are biographies and historical novels. The reference collection contains 5 sets of encyclopedias and more than 125 specialized dictionaries and handbooks. In addition to the book collection, about 80 periodicals and four newspapers are received currently. The Library is also the audio-visual center of the school. Included are a variety of projection equipment and a fast growing collection of films, filmstrips, and slides. There is available a good selection of other materials, such as pamphlets and clippings.

The Library is open from 8:00 A.M. to 10:00 P.M. daily. A full-time librarian is on hand to assist students with special problems.

Evening Class

Other than those courses offered at extension units, the Wayne Technical Institute can offer a great diversity of classes, not only at the Institute, but for groups in their own area. These courses generally do not carry credit toward graduation from a regular diploma or degree program; but, are primarily designed to assist persons already employed to upgrade their knowledge and skills in order to develop improved performance on their jobs. Those students successfully completing a course of this nature will be awarded a certificate of completion by the Institute. A permanent record for each student is kept in the Institute's records section and a transcript will be made available to the student or his employer upon request.

ADMISSION

ENTRANCE REQUIREMENTS:

The applicant should be a high school graduate or be able to demonstrate experience and mental growth equivalent to that of a high school graduate. He must make an acceptable score on an Aptitude Test Battery administered and must show an earnest desire to enter the field of study chosen. In addition, students interested in the Dental Assisting or Practical Nursing Program must meet certain standards as to weight, personal appearance, and character.

Those applicants who are not academically prepared to enter programs of their choice may enroll in a special program devised to prepare them to enter specific programs of their choice.

If he is physically handicapped, the administration of the Wayne Technical Institute will consider each individual's problem to determine whether the handicap will hinder his chances for employment in the chosen field.

WHEN TO ENROLL:

Students desiring to enter may enroll in the Fall, Winter, Spring, or Summer Quarters, either on a full-time or part-time basis in all programs except Practical Nursing. In Practical Nursing, students may enter during the Fall or Spring Quarters.

APPLICATIONS:

There is no fee charged to students desiring to make applications to the Institute for admission. Applications should be submitted to the Institute's Admissions Office in advance of the beginning date of the Quarter in which he wishes to enroll. Students majoring in any field, other than Practical Nursing, may enroll at the beginning of any quarter. Students interested in Practical Nursing may make application to begin in the Fall or Spring Quarter.

Provisional Students:

Students applying too late to take the required pre-entrance examinations may be given a brief test and if the results appear satisfactory, the applicant will be permitted to enter the Institute as a Provisional Student. A Provisional Student will be required to complete the Pre-entrance examination and submit all required transcripts as soon as possible. In other words, he is admitted in good standing, provided examination scores, transcripts and other information prove satisfactory.

Probationary Students:

Students who have completed pre-entrance examinations and provided the Institute with required transcripts, may not meet the Institute's minimum entrance standards for the field they have chosen. After counseling, those students not interested in considering other possibilities may be permitted to pursue the curriculum of their choice for a trial period of one quarter, provided the Admissions Office, after considering all the facts, decides the individual possesses characteristics considered important to success, but not measurable by any test. After one quarter the student may be given regular student status or be advised to pursue another course more compatible with his ability and background.

Special Students:

Those students with particular needs or problems, will be given all possible assistance the Institute can render. Those students desiring to attend the Institute under this classification should set up an appointment with the Admissions Office. Individual programs of study will be worked out if both the Admissions Office and the interested party feel that participation would prove beneficial. This program does not lead toward a degree or diploma. The student may enroll in this program in order to attain the necessary background needed to enter a diploma or degree program.

DIPLOMA:

A diploma is awarded to a student who completes an Institute diploma program with a general grade average of "C" or better in his major field of study and who has at least two quality points for each Quarter Hour of Credit earned in his total program.

DEGREE:

On January 9, 1964, the North Carolina State Board of Education licensed the Board of Trustees of the Wayne Technical Institute to award the Associate of Applied Science Degree in those curriculums already approved by the State Board of Education and offered by the Institution. The Associate of Applied Science Degree is a two year college degree. A degree is awarded to a student who completes an Institute degree program with a general grade average of "C" or better in his major field of study and who has at least two quality points for each Quarter Hour of Credit earned in his total program.

TRANSCRIPTS:

Students applying for admission will submit copies of their transcripts along with their applications or shortly thereafter. Transcripts from each institution previously attended must be forwarded to the Admissions Office.

TRANSFER OF CREDITS:

Quarter hours of credit earned at the Wayne Technical Institute can be transferred to any of the Institutions under the Department of Community Colleges in North Carolina. Transfer of credits to institutions other than North Carolina's System of Community Colleges, would be determined by the institution to which the student wished to transfer. Grades transferred between Institutions of the Department of Community Colleges would be accepted as recorded.

Students who have not taken a course at the Institute but wish to receive credit by examination may do so provided the respective Division Chairman approves, and a satisfactory score on the examination is made. Students who receive credit by examination will receive a grade of "C" for the course.

EXPENSES

TUITION PER QUARTER:

Tuition	$30.00
Activity Fee	2.00
TOTAL	$32.00

Tuition for students taking less than 15 quarter hours of credit will be two dollars per quarter hours of credit.

Time payments may be arranged at the business office.

REGISTRATION FEE:

A two dollar registration fee is to be paid once each school year.

OUT OF STATE STUDENTS:

Any student whose legal residence is outside of the State of North Carolina or, in the case of younger students who are boarding or living with relatives in the community, whose parents or guardians live outside of the State, will pay registration and tuition fees two-and-a-half times the in-State rate.

TEXTBOOKS:

Students are required to purchase their textbooks. For their convenience, the Institute maintains a bookstore in which books, uniforms and other required items, necessary to a program of study, may be purchased by the student. The cost of these items varies according to the program the student elects to pursue.

REFUNDS:

All accounts paid in advance are subject to refund on a prorated basis.

Federal-State Aid Programs:

The institution has and maintains the following policy for the refund of the unused portion of tuition, fees, and other charges in the event the student fails to enter the course or withdraws or is discontinued therefrom at any time prior to completion.

The amount charged the student for tuition, fees and other charges for a portion of the course will not exceed the approximate pro rata portion of the tuition, fees, and other charges that the length of the completed portion of the course bears to its total length.

All Others:

The refund policy shall permit a refund of two-thirds of the tuition when withdrawal occurs before the end of 20 school days (the first school month) of the term. Time payments of one-third down and a third at the first of the next two months may be arranged at the discretion of the Business Office.

LATE REGISTRATION:

A student registering later than the date designated as registration day, must pay an additional fee of one dollar.

CREDIT FOR WORK COMPLETED:

No degree, diploma or certificate will be granted, or a transcript of credits furnished a student until all financial obligations to the Institute, other than student loans, have been paid. Transcripts will not be issued to persons not meeting due payments on student loans.

All previously incurred expenses and accounts at the Institute must be fully paid before a student may re-enter at the beginning of any quarter.

SCHOLARSHIPS:

Scholarship aid is available to worthy students from several sources. The School is endeavoring to provide other aid as it can be found.

LOAN FUNDS:

The State Board of Education, at its May 2, 1963 meeting, authorized acceptance of a gift from the North Carolina Consumer Finance Association in the amount of $10,675.00, to be used as a loan fund for students in vocational and technical education. This loan fund is available to students at the Wayne Technical Institute, enrolled on a full-time basis. The maximum loan under this fund is $300.00 per year.

Other loan funds are available to worthy students from civic and business organizations. The administration will be glad to consult with students about the availability of these funds.

SELF-HELP:

Many students at the Wayne Technical Institute hold part-time jobs to help defray the cost of their living expenses. These jobs are available in limited numbers in and around Goldsboro.

Wayne Technical Institute has launched a program of student self-help and hired students to take on responsibilities in the School. This program is now helping a number of students with their expenses and will be expanded as need arises.

REHABILITATION:

The Wayne Technical Institute has students enrolled in full-time curriculums, who are liberally helped by the North Carolina Department of Public Instruction, Division of Vocational Rehabilitation.

The Federal Government offers a similar program of rehabilitation for veterans and war orphans.

STUDENT HOUSING:

Although the Institute does not have Dormitory facilities, a list of persons interested in renting rooms or apartments to Institute students, is available. A current list of Goldsboro residents offering these facilities may be obtained from the Institute upon request. Cost will vary, but will range between $20.00 to $40.00 per month; according to the livability and convenience. The Institute staff will assist interested students in locating adequate housing.

ACADEMIC

QUARTER SYSTEM:

The Wayne Technical Institute operates on the Quarter Plan. The Fall, Winter, Spring and Summer Quarters are each approximately eleven weeks in length. Most classes operate five days a week.

CREDIT:

Quarter hours of credit are awarded as follows: one quarter hour of credit for each hour per week of class work, one quarter hour of credit for each two hours per week of laboratory work, and one quarter hour for each three hours of shop practice per week.

Quarter hours of credit earned at the Wayne Technical Institute can be transferred to any of the institutions under the North Carolina Dept. of Community Colleges.

SCHOLARSHIP:

A quality point system is used to calculate all student scholarship standings. The grades A, B, C, D, F, and I are used by this Institute; A is the highest grade given, D is the lowest passing grade, and F is a failing grade. A grade of "I", which is a conditional grade, is given for a deficiency in quantity and not for a deficiency in qualty of work. A grade of "I" must be removed during the next quarter the student is enrolled in the Institute or it becomes a failure automatically. If the student does not return to school the "I" must be removed within one year or it automatically becomes an "F". An "F" may not be removed by repeating the course.

EXPLANATION OF GRADES:

A — Excellent, (93-100) ; B — good, (85-92) ; C — average (78-84) ; D — barely passed, (70-77) ; F — failed, course must be repeated to secure credit; P — passed; I — condition.

In terms of quality points, a grade of A earns 4 quality points per quarter hour; the grade B earns 3 quality points per quarter hour; and the grade C earns 2 quality points per quarter hour. The grade of D earns 1 quality point per quarter hour. After the close of each quarter, term reports of all students in all their studies are sent to parents or guardians.

HONOR ROLL:

The Honor Roll is composed of students who make at least three quality points per credit hour on all work taken with no grade below C.

ABSENCES:

Requests for excused absences from class must be made to the Institute's Administration Office not later than one week after the student returns to class. If the absence was incurred within a week before the end of the quarter, the student should contact the office immediately concerning such absences that need excusing.

Regularity of class attendance is expected of all students. Each class absence incurs the loss of some educational value to the student and places an additional responsibility on both the student and the instructor. Absences in considerable numbers may lead to the lowering of scholastic standards.

Absences from class will be excused for the following reasons only:

1. Illness of the student.
2. Representation of the school in an activity that is recognized by the Administration when such representation is reported to the School by a member of the faculty.
3. Death of a member of the student's immediate family.
4. Circumstances which, in the opinion of the Institute Administration, warrant an excused absence or absences.

One quality point will be deducted for each unexcused absence incurred by a student.

A student **must attend** at least seventy-five percent of the class meetings of any course in order to receive credit for the course.

Classes missed due to late registration count as absences.

REQUIREMENTS FOR GRADUATION:

A student must have a general grade average of C or better in his field of study and must have at least two quality points for each quarter hour of credit earned in his total program in order to graduate and receive a diploma or degree.

WITHDRAWALS:

Students desiring to leave the Institute during the quarter must withdraw officially through the Office. This can be done with an official withdrawal slip obtained from the Director of Student

Personnel. There is no penalty if a student withdraws prior to the date specified in the Institute calendar as the last date for withdrawing without failure. Failures are recorded on all courses for students who withdraw after that date. However, if a student withdraws after the deadline with the approval of a physician, a grade of WP or WF will be recorded on each course. Students who withdraw without following the above procedures will receive failing grades on all courses for which he is registered.

A student making official withdrawal from the Institute must report to the Director of Student Personnel in order that proper steps may be taken toward withdrawal.

CREDITS FOR PREVIOUS TRAINING:

Educational work completed by the student in other accredited schools may, where applicable, be accredited toward the requirements of an Institute Diploma Program. Students are expected to file transcript of all previous work. A minimum of two quarters of residence is required for graduation.

PROGRESS AND COURSE SELECTION:

No student will be permitted to major in more than one curriculum at a time.

An evaluation of the progress of the student will be made each quarter, and if his work is found to be unsatisfactory, he will be called in for counseling. After consultation with the counselor, another quarter for improvement may be granted, or the student may be advised to change to a course more agreeable to his ability and background.

Any student who desires to change his program of studies should first discuss it with the Head of his Department, then with the Director of Student Personnel.

REGISTRATION:

All students are required to register at the beginning of each quarter they are in attendance.

ACCREDITATION:

The Wayne Technical Institute is accredited and operated by the North Carolina State Department of Community Colleges under the State Board of Education as specified in Chapter 115A of the General Statutes of North Carolina.

The Institute has been approved as an institution eligible to administer the Student Loan Fund - Vocation and Technical Education.

CONDUCT AND STANDARDS

Wayne Technical Institute has a genuine concern for the integrity of all students enrolled. Students are required to conduct themselves in a mature and responsible manner.

The following rules apply to all students who are enrolled in this institution:

1. Each student is held responsible for information published through notices and announcements placed on bulletin boards.
2. Students who negligently lose, damage, destroy, sell, or otherwise dispose of school property placed in their possession or entrusted to them will be charged for the full extent of the damage or loss and are subject to disciplinary action.
3. Under no condition will alcoholic beverages or narcotics be permitted in or on the school property. No one under the influence of alcohol or narcotics will be allowed on school premises. Any violation of this regulation will result in expulsion from the Institute on the first offense.
4. Students who engage in such acts as stealing, gambling. profane language, personal combat, and possession of firearms and dangerous weapons are liable to disciplinary action.
5. Smoking is prohibited in all classrooms, laboratories and shops at all times.
6. Students are expected to make use of the disposal containers in the halls, shops and classrooms when discarding materials.
7. Students are expected to dress appropriately for all occasions.
8. Due to the amount of danger areas in the Institute, students are asked not to bring children to class with them.
9. Students are to enter the office on business only.
10. Students must remember that when entering and leaving the school parking areas that they must always proceed with caution.
11. Drinking of soft drinks, milk shakes and coffee; eating of food, is allowed only in designated areas. Drinks and food should be kept within the limits of the student lounge or out of doors.
12. Parking is allowed only in designated areas. (Parking spaces only). Faculty and staff parking is marked by name plates.

AGRICULTURAL TECHNOLOGY—BUSINESS

William J. Seibert, *Division Chairman*

Rapid technological changes in farming and related agricultural businesses have given rise to the need for more technically trained people. A variety of agricultural businesses and industries employ persons to assist in marketing, processing, and distributing of farm products and providing services to the farmer. Many responsible positions in agricultural businesses and industries require technical training not available in high schools or in four-year colleges.

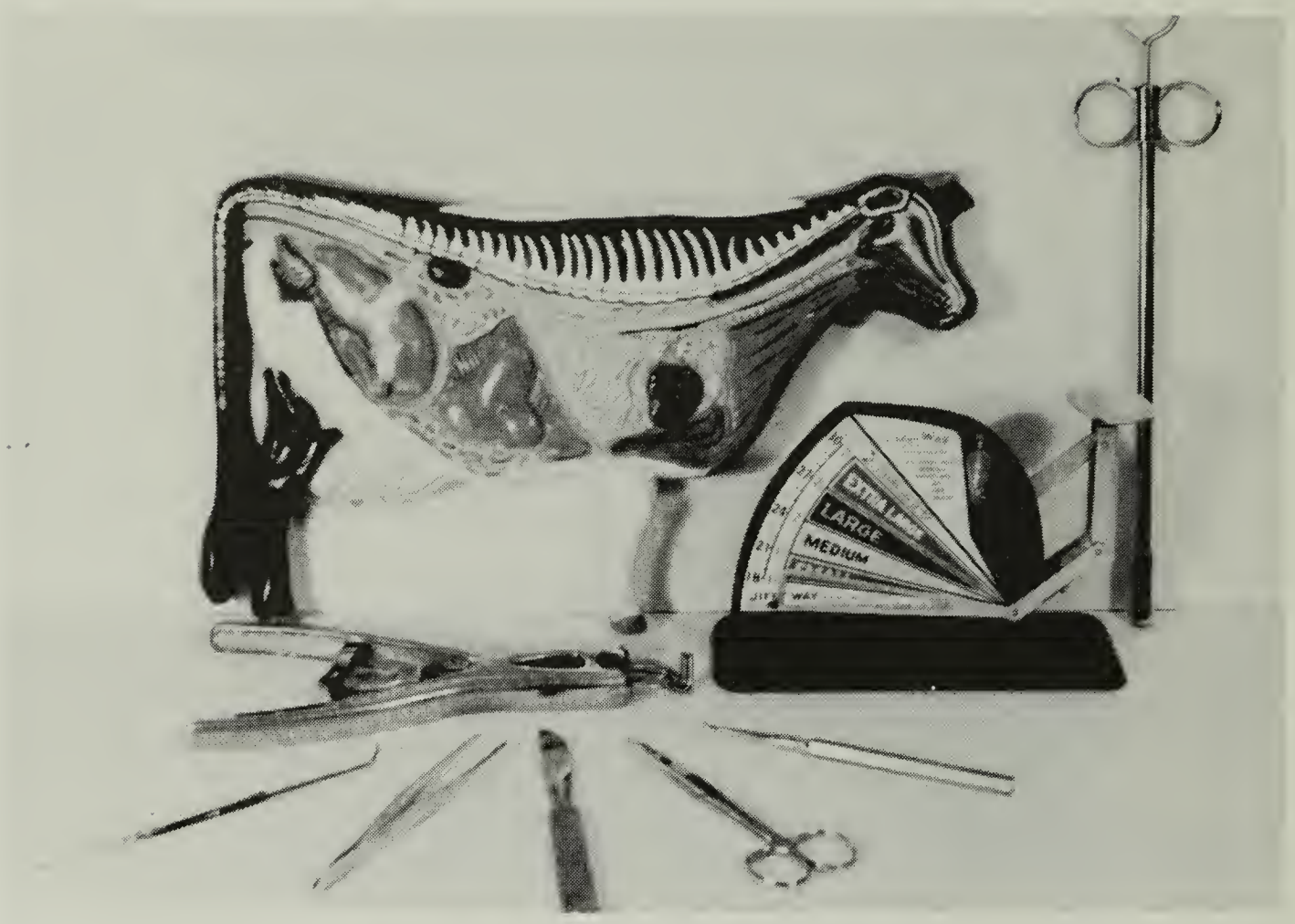
The Agricultural Business Curriculum is designed to help students acquire knowledge, understanding, and abilities in the broad field of agricultural business, including agricultural production. It combines knowledge of agriculture with business training to prepare the graduate for many of the varied employment opportunities in agriculture. The specific objectives of the Agricultural Business Curriculum are to develop the following student competencies:

1. Understanding of the principles of organization and management in agricultural businesses and industries.
2. Understanding of the application of the principles of business management to agricultural production, and the abilities essential to the management of an efficient well-organized farming operation.
3. Understanding of the basic principles of our economic system, marketing, credit, price concepts and governmental policies and programs relating to agriculture.
4. Understanding of the agricultural sciences most essential to the production and marketing of agricultural products, including knowledge of the animal, plant, and soil sciences and their relationships with ability to apply these educational experiences to practical problems of agricultural business and industry.

AGRICULTURAL TECHNOLOGY—BUSINESS

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AG	370	Animal Science	6
BUS	301	Introduction to Business	3
BUS	317	Sales Development	3
ENG	302	Communicative Skills: English	3
MA	310	Business Mathematics	3
			18
SECOND QUARTER			
AG	310	Introduction to Agricultural Economics	4
AG	490	Soil Science and Fertilizers	6
BUS	320	Accounting	6
ENG	305	Communicative Skills: Report Writing	3
			19
THIRD QUARTER			
AG	312	Agricultural Marketing	6
AG	420	Plant Science	6
BUS	355	Interpreting Accounting Records	3
BUS	360	Office Machines	3
			18
FOURTH QUARTER			
AG	314	Farm Business Management	6
AG	326	Agricultural Programs and Agencies	4
BUS	364	Business Finance	3
BUS	366	Budget and Record Keeping	3
Elective**			3
			19
FIFTH QUARTER			
AG	306	Farm Chemicals	6
AG	322	Agricultural Prices	3
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Elective**			3
			17
SIXTH QUARTER			
AG	342	Farm Mechanization	4
AG	380	Livestock Diseases and Parasites	4
BUS	368	Taxes	3
BUS	372	Principles of Supervision	3
Elective**			3
			17

**Elective courses must be selected from the associate degree curriculum. Six hours of the electives should be in agriculture. Local institutions may add work experience to this curriculum.



AGRICULTURAL TECHNOLOGY—POULTRY AND LIVESTOCK

William J. Seibert, *Division Chairman*

Commercial poultry and livestock production are becoming increasingly specialized. Poultry and livestock farms continue to grow in size and value. By the year 1975 North Carolina will need to produce 60 percent more broilers and chickens, 49 percent more eggs and 49 percent more turkeys. Similar increases in need for livestock and their products are anticipated.

The content of this curriculum is designed to give students a good understanding of the principles, methods, techniques and skills which are essential for successful employment in the poultry and livestock industry. Sound technical training is a requirement for successful employment in North Carolina's expanding poultry and livestock industry.

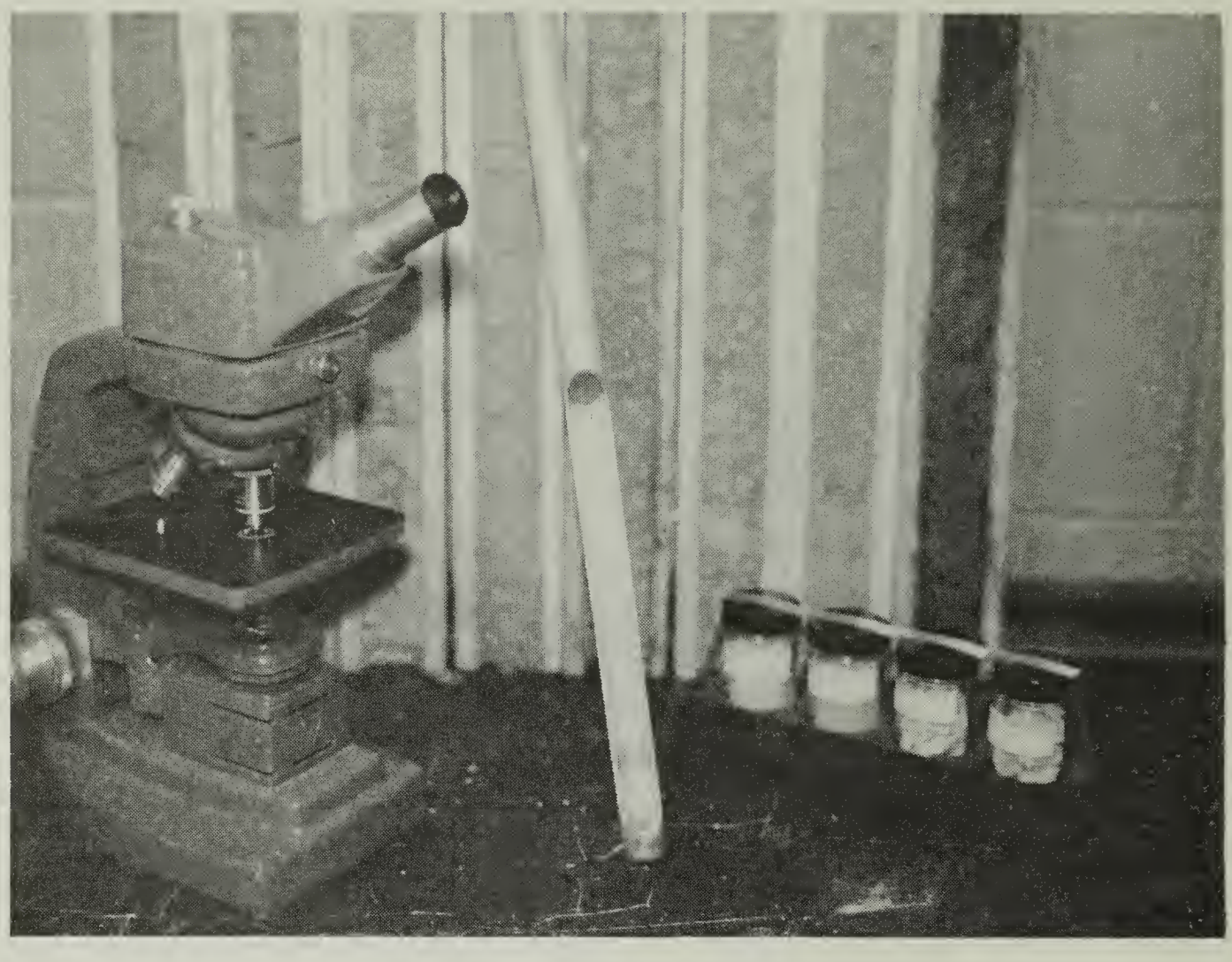
The objectives of the Poultry and Livestock Technology curriculum are to develop understanding and ability in:

1. Production, marketing, processing, and distributing livestock and poultry and their products according to the scientific principles essential to efficient and profitable operations.
2. Specializations of livestock and poultry industry, including automation, materials handling, manpower efficiency, production control, schedules and contractual arrangements; vertical and horizontal integration.
3. Practical principles of our economic system with emphasis on governmental policies and programs pertaining to agricultural production and marketing.
4. Effective communication and human relations in dealing with human behavior problems connected with the production, marketing, and distribution of agricultural products and supplies.

AGRICULTURAL TECHNOLOGY—POULTRY AND LIVESTOCK

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AG	370	Animal Science	6
AG	460	General Poultry Science	4
BUS	317	Sales Development	3
ENG	302	Communicative Skills: English	3
MA	310	Business Mathematics	3
			19
SECOND QUARTER			
AG	310	Introduction to Agricultural Economics	4
AG	490	Soil Science and Fertilizers	6
CHEM	301	Chemistry	4
ENG	305	Communicative Skills: Report Writing	3
			17
THIRD QUARTER			
AG	312	Agricultural Marketing	6
AG	420	Plant Science	6
AG	464	Poultry Enterprises	6
			18
FOURTH QUARTER			
AG	314	Farm Business Management	6
AG	372	Animal Nutrition	3
AG	374	Dairy and Beef Production	6
AG	468	Poultry Health	4
			19
FIFTH QUARTER			
AG	462	Poultry Housing and Equipment	4
BUS	335	Business Management	3
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Electives*			6
			18
SIXTH QUARTER			
AG	342	Farm Mechanization	4
AG	388	Swine Production	4
AG	466	Marketing Poultry Products	4
BUS	372	Principles of Supervision	3
Elective*			3
			18

*Elective courses must be selected from the associate degree curriculum. Local institutions may add work experience to this curriculum.



AGRICULTURAL TECHNOLOGY—SOIL CONSERVATION

William J. Seibert, *Division Chairman*

Our population survives on a thin, vital, living layer of the earth's surface known as *top soil*—the producer of food and wealth. Erosion, an insidious, sly and treacherous destroyer, has resulted in the loss of about one third of this top soil since our nation won its independence in 1776. Unless soil and water erosion is checked and replaced with constructive, conserving methods, our living standards will be reduced and the United States will ultimately be destroyed. Many people are involved at the professional, technical and skilled level in conserving our soil and water resources.

The purpose of the Agricultural Technology—Soil Conservation Curriculum is to help students acquire knowledge, understandings and abilities essential in conserving soil and water resources. The specific objectives are to develop the following student competencies:

1. Understanding of the principles involved in soil and water conservation.
2. Understanding of farm production problems as related to soil and water conservation.
3. Ability to supply farmers, ranchers and others with technical assistance in planning, applying and maintaining measures and structural improvements for soil and water conservation.
4. Ability to communicate effectively and to deal with individual human behavior problems in working with farmers and ranchers.

Although the curriculum is primarily aimed at training soil conservation technicians, it is felt that graduates would be well qualified to serve in a technical capacity with the Agricultural Stabilization and Conservation program (ASCS) and with golf associations.

AGRICULTURAL TECHNOLOGY—SOIL CONSERVATION

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AG	370	Animal Science	6
BUS	317	Sales Development	3
DD	307	General Drafting	3
ENG	302	Communicative Skills: English	3
MA	312	Algebra	5
			20
SECOND QUARTER			
AG	310	Introduction to Agricultural Economics	4
AG	490	Soil Science and Fertilizers	6
CHEM	301	Chemistry	4
ENG	303	Communicative Skills: Technical Writing	3
MA	313	Trigonometry	5
			22
THIRD QUARTER			
AG	389	Wildlife Science	3
AG	420	Plant Science	6
CHEM	302	Chemistry	5
CIV	310	Surveying I	4
PHY	301	Physics: Property of Matter	4
			22
FOURTH QUARTER			
AG	494	Soil Fertility	4
AG	428	Weed Identification and Control	5
AG	495	Soil Classification	3
AG	497	Soil Conservation I	5
Elective*			3
			20
FIFTH QUARTER			
AG	426	Pastures and Forage Crops	3
AG	498	Soil Conservation II	5
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Elective*			
			17
SIXTH QUARTER			
AG	304	Recreation	3
AG	326	Ag. Prog. and Agencies	4
AG	400	Farm Forestry	4
AG	423	General Bacteriology	4
AG	499	Soil Conservation III	5
			20

*Elective courses must be selected from the associate degree curriculum. Local institutions may add work experience to this curriculum.

BRICK MASONRY

Don Howell, *Division Chairman*

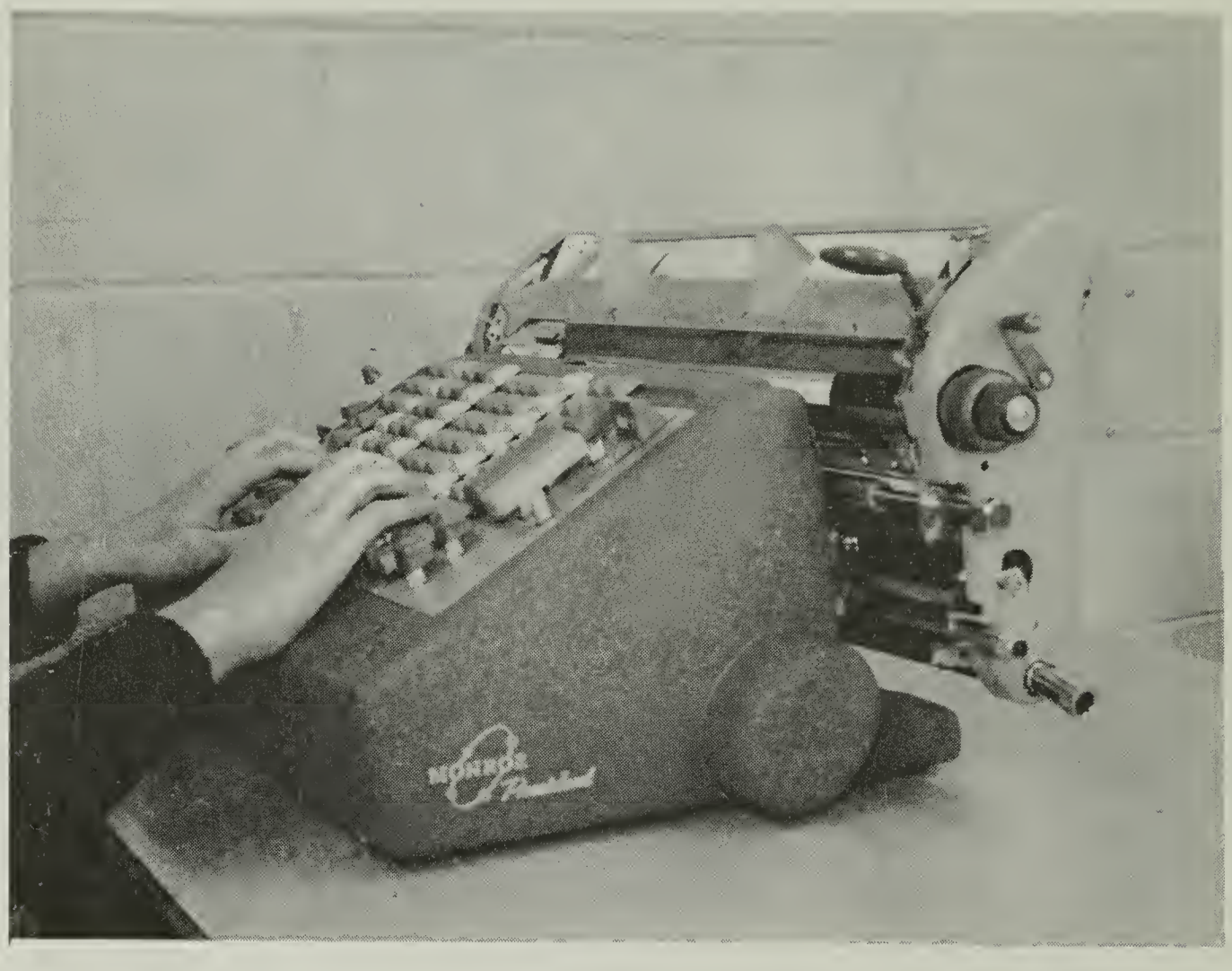
The Bricklaying Curriculum provides a training program for developing the basic knowledge and skills needed in constructing walls, partitions, fireplaces, chimneys, and other structures from brick. Students will be taught to use other masonry materials, such as concrete, cinder, or gypsum block; structural tile, or terra cotta. Instruction will be given in the installation of brick linings of industrial kilns and furnaces.

Students will have opportunity to acquire a thorough knowledge of the kinds of tools and how to use both hand tools and power tools such as chisels, trowels, jointers, tuck pointers, bricklayers's hammers, gage lines, plumb bobs, mason levels, and power saws used for cutting masonry materials.

The employment of bricklayers is expected to rise rapidly over the 1960-1970 decade. Between 1950 and 1960, employment of these craftsmen rose from about 165,000 to more than 250,000. Increasing use of structural clay tile for fire resistant partitions and glass blocks for exterior walls is expected, causing increased demand for skilled bricklaying craftsmen.

BRICK MASONRY

		Course Title	*Course Hours Per Week*			
			Class	*Lab*	*Shop Prac.*	*Quarter Hours Credit*
FIRST QUARTER						
MAS	111	Bricklaying I	3	0	15	8
MATH	120	Fundamentals of Math	5	0	0	5
DD	121	Blueprint Reading	3	0	0	3
			11	0	15	16
SECOND QUARTER						
MAS	112	Bricklaying II	3	0	15	8
MAS	114	Estimating	5	0	0	5
DD	126	Blueprint Reading For Masons	3	0	0	3
SOC	101	Human Relations	2	0	0	2
			13	0	15	18
THIRD QUARTER						
MAS	113	General Masonry	3	0	15	8
MAS	115	Special Masonry Problems	3	0	9	6
			6	0	24	14



BUSINESS—ACCOUNTING

Walter D. Brown, *Division Chairman*

Accounting is one of the fastest growing employment fields in America today, and the job outlook for good accountants seems bright for many years to come. These opportunities result from the tremendous business and industrial expansion in all parts of the country. Because of this emphasis, there is a growing need for trained people in the area of accounting to help managers keep track of a firm's operation. The Accounting Curriculum is designed to fill this need by offering students the necessary accounting theories and skills for the entry into the accounting profession.

The duties and responsibilities of an accountant vary somewhat in different firms. Some of the things an accountant might do are: record transactions, render periodic reports, maintain cost records, make special reports, complete tax returns, audit the books, and advise management in areas of financial affairs.

The graduate of the Accounting Curriculum may qualify for various jobs in business and industry leading to any of the following accounting positions: Accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare them to become office managers, accounting supervisors, and to fill other responsible positions in a business firm.

ACCOUNTING

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
BUS	301	Introduction to Business	3
BUS	302	Typewriting (Or Elective)*	3
BUS	319	Credit Procedures and Problems	3
BUS	351	Business Law	3
ENG	302	Communicative Skills: English	3
MA	310	Business Mathematics	3
			18
SECOND QUARTER			
BUS	320	Accounting	6
BUS	339	Marketing	3
BUS	352	Business Law	3
ENG	305	Communicative Skills: Report Writing	3
SOC	302	Economics	3
			18
THIRD QUARTER			
BUS	321	Accounting	6
BUS	328	Business Insurance	3
BUS	360	Office Machines	3
ENG	306	Communicative Skills: Business Communications	3
SOC	304	Economics	3
			18
FOURTH QUARTER			
BUS	322	Accounting	6
BUS	353	Business Law	3
BUS	364	Business Finance	3
DP	311	Introduction to Data Processing Systems	4
ENG	307	Communicative Skills: Oral Communications	3
			19
FIFTH QUARTER			
BUS	323	Cost Accounting	4
BUS	374	Advanced Accounting	4
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Elective**			6
			19
SIXTH QUARTER			
BUS	333	Personnel Management	3
BUS	368	Taxes	3
BUS	369	Auditing	3
BUS	371	Office Management	3
BUS	375	Machine Accounting	4
			16

*Elective course must be selected from business education curriculum.
**Elective courses must be selected from the associate degree curriculum. The institution may elect to require certain courses or may let the student have a free elective.

BUSINESS ADMINISTRATION

Walter Brown, *Division Chairman*

Since 1957 more than half of the employed people in the United States have engaged in distributing goods or rendering services. Leading manufacturers recently stated " . . . our major problem is in marketing . . ." This means that major opportunities exist in fields of marketing and distribution. Young people who are educationally and personally qualified can achieve great satisfaction and financial rewards through careers in distribution and marketing.

In North Carolina the opportunities in business are especially bright. The population of the State is becoming increasingly urban and much more differentiating in its demands for goods and services. With the increasing industrial development in this State, it becomes essential to market our products fore effectively. In many instances business has become increasingly competitive, much more highly organized and automated. This situation limits the better opportunities in business to those with specialized education beyond the high school level.

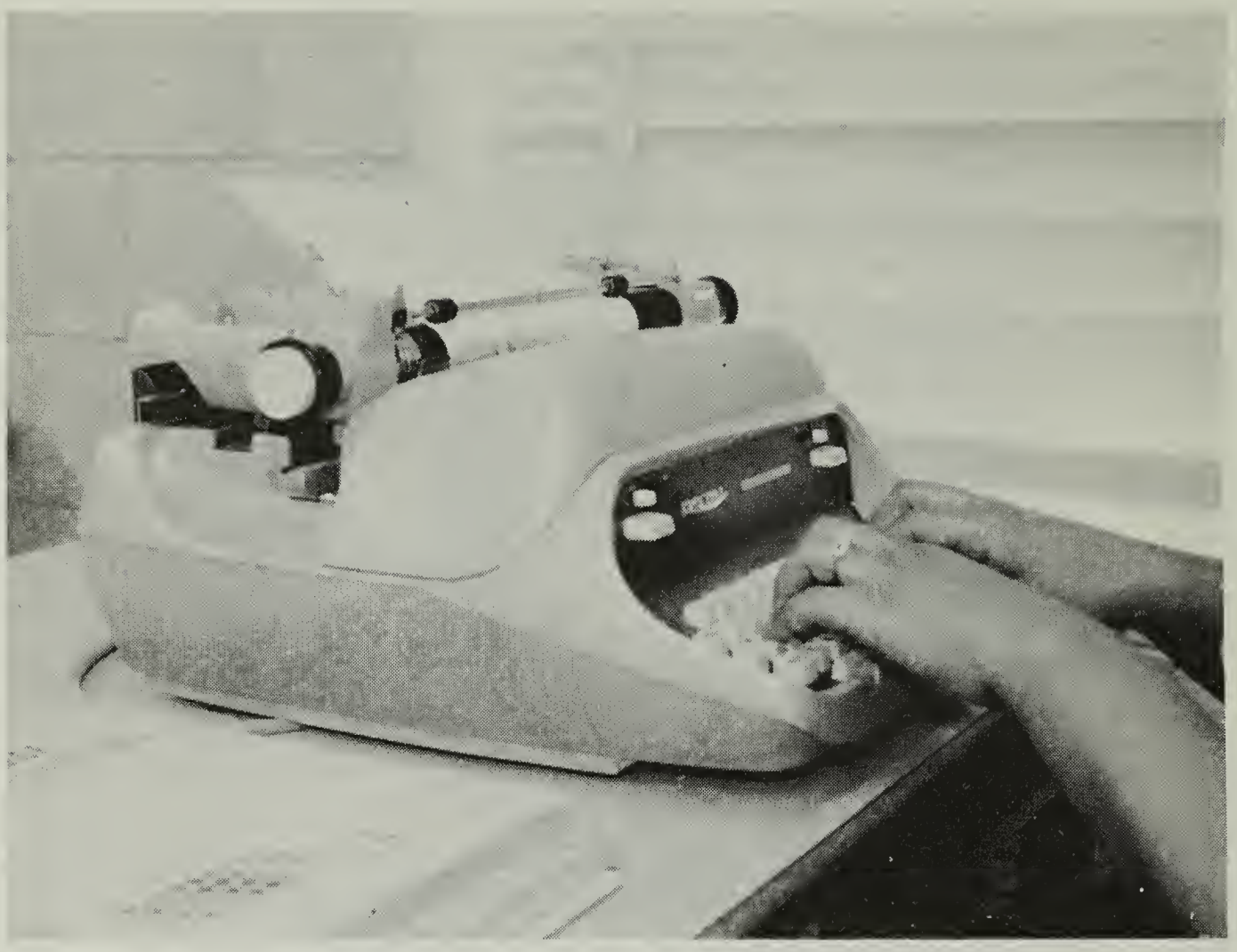
The graduate of the Business Administration program may enter Distribution and Marketing in a variety of career opportunities from beginning salesperson or office clerk to owner and manager in many areas such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist and travel industry; insurance; selling—retail, wholesale, industrial and specialty; transportation; and communications.

BUSINESS ADMINISTRATION

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
BUS	301	Introduction to Business	3
BUS	302	Typewriting (Or Elective)*	3
BUS	317	Sales Development	3
BUS	351	Business Law	3
ENG	302	Communicative Skills: English	3
MA	310	Business Mathematics	3
			18
SECOND QUARTER			
BUS	320	Accounting	6
BUS	339	Marketing	3
BUS	352	Business Law	3
ENG	305	Communicative Skills: Report Writing	3
SOC	302	Economics	3
			18
THIRD QUARTER			
BUS	316	Retailing	3
BUS	328	Business Insurance	3
BUS	355	Interpreting Accounting Records	3
BUS	360	Office Machines	3
ENG	306	Communicative Skills: Business Communications	3
SOC	304	Economics	3
			18
FOURTH QUARTER			
BUS	337	Wholesaling	3
BUS	364	Business Finance	3
BUS	366	Budget and Record Keeping	3
DP	311	Introduction to Data Processing Systems	4
ENG	307	Communicative Skills: Oral Communications	3
Elective*			3
			19
FIFTH QUARTER			
BUS	327	Advertising	4
BUS	335	Business Management	3
BUS	365	Business Finance	3
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Elective**			3
			18
SIXTH QUARTER			
BUS	332	Sales Promotion Management	3
BUS	333	Personnel Management	3
BUS	368	Taxes	3
BUS	372	Principles of Supervision	3
Elective**			5
			17

**Elective courses must be selected from the associate degree curriculum. The institution may elect to require certain courses or may let the student have a free elective.

*Elective courses must be selected from the business education curriculum.



BUSINESS—EXECUTIVE SECRETARY

Walter D. Brown, *Division Chairman*

The demand for better qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a training program that will provide training in the accepted procedures required by the business world and to enable persons to become proficient soon after excepting employment in the business office.

The Executive Secretary Curriculum is designed to offer the students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment in the business world. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personality development. During the last quarter, the student engages in six hours of office application each week in a business office.

The graduate of the Executive Secretary Curriculum should have a knowledge of business terminology, skill in dictation and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.

EXECUTIVE SECRETARY

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
BUS	301	Introduction to Business	3
BUS	302	Typewriting (Or Elective)*	3
BUS	306	Shorthand (Or Elective)*	3
BUS	351	Business Law	3
ENG	302	Communicative Skills: English	3
MA	310	Business Mathematics	3
			18
SECOND QUARTER			
BUS	303	Typewriting (Or Elective)*	3
BUS	307	Shorthand	3
BUS	320	Accounting	6
ENG	305	Communicative Skills: Report Writing	3
SOC	302	Economics	3
			18
THIRD QUARTER			
BUS	304	Typewriting	3
BUS	308	Shorthand	3
BUS	360	Office Machines	3
BUS	383E	Terminology and Vocabulary (Business)	3
ENG	306	Communicative Skills: Business Communications	3
SOC	312	Personality Development	3
			18
FOURTH QUARTER			
BUS	350E	Advanced Typewriting (Business)	3
BUS	356E	Dictation and Transcription (Business)	4
BUS	361	Office Machines	3
DP	311	Introduction to Data Processing Systems	4
ENG	307	Communicative Skills: Oral Communications	3
Elective**			3
			20
FIFTH QUARTER			
BUS	340	Secretarial Procedures	3
BUS	357E	Dictation and Transcription (Business)	4
BUS	366	Budget and Record Keeping	3
ENG	304	Communicative Skills: Speech	2
SOC	310	Applied Psychology	3
Elective**			3
			18
SIXTH QUARTER			
BUS	358E	Dictation and Transcription (Business)	4
BUS	370E	Office Application (Business)	6
BUS	371	Office Management	3
Elective**			3
			16

*Elective courses must be selected from the business education curriculum.
**Elective courses must be selected from the associate degree curriculum. The institution may elect to require certain courses or may let the student have a free elective.

DENTAL ASSISTING

Dr. George Mayo, *Division Chairman*

In former years the dentist was taught to work alone; and if any assistance was utilized, it was in the capacity of an untrained person to clean up and perhaps answer the telephone. During the past several years, a quiet revolution has been occurring in dental offices all over the country.

Because of increasing population and a higher educational level of the general population, the demand for dental services has increased tremendously. In order to keep up with increasing demands for service, the dental profession has come to rely on auxiliary personnel to do those things in a dental office which do not require the training and skill of the dentist. Consequently, the dental assistant is no longer used only for menial tasks; but with adequate training she is taking her place on the dental health team as an indispensable and valuable ally to the dental profession.

The dental assistant is now being trained to assume positions of high responsibility and is being used increasingly in the capacities of office manager, and chairside surgical assistant.

At Wayne Technical Institute, one will have the opportunity to train in a modern, well-equipped school designed especially for training the dental assistant. The dental assistant trainee works directly under the supervision of several certified dental assistant teachers and a number of dentists from the local area. Each member of the administration and teaching staff has been certified by the Division of Professional Services, State Department of Public Instruction. The program includes comprehensive training in all areas of dental assisting, including office management, patient education, secretarial procedures, office laboratory procedures, and chairside surgical assisting.

DENTAL ASSISTING

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
DA	101G	Dental Anatomy and Physiology	2
DA	102G	Bacteriology	1
DA	103G	Oral Pathology	1
DA	104G	Introduction to Practice	1 (2)
DA	110G	Pharmacology—Diet & Nutrition	1
DA	111G	Dental Materials	7 (9)
ENG	302	Communicative Skills	3
TS	131	Accounting	4
TS	132	Typing	3
			23
SECOND QUARTER			
DA	105G	Clinical Orientation I	7 (8)
DA	112G	Gross Anatomy and Physiology	1
DA	113G	Personal Hygiene	1
DA	114G	First Aid	1
DA	116G	Equipment Care	1
DA	117G	Roentgenology	2
DA	118G	Supplies	1
DA	120G	Records	3
ENG	303	Technical Writing	3
			20
THIRD QUARTER			
DA	107G	Clinical Orientation II	7
DA	108G	Clinical Practice I	8
DA	119G	Patient Management	1
ENG	304	Technical Speech	1
SOC	101	Human Relations	2
			20
FOURTH QUARTER			
DA	109G	Clinical Practice II	13
DA	190G	Professional Leadership	2
		Personal Improvement	3
			18

ELECTRIC LINE TRADE

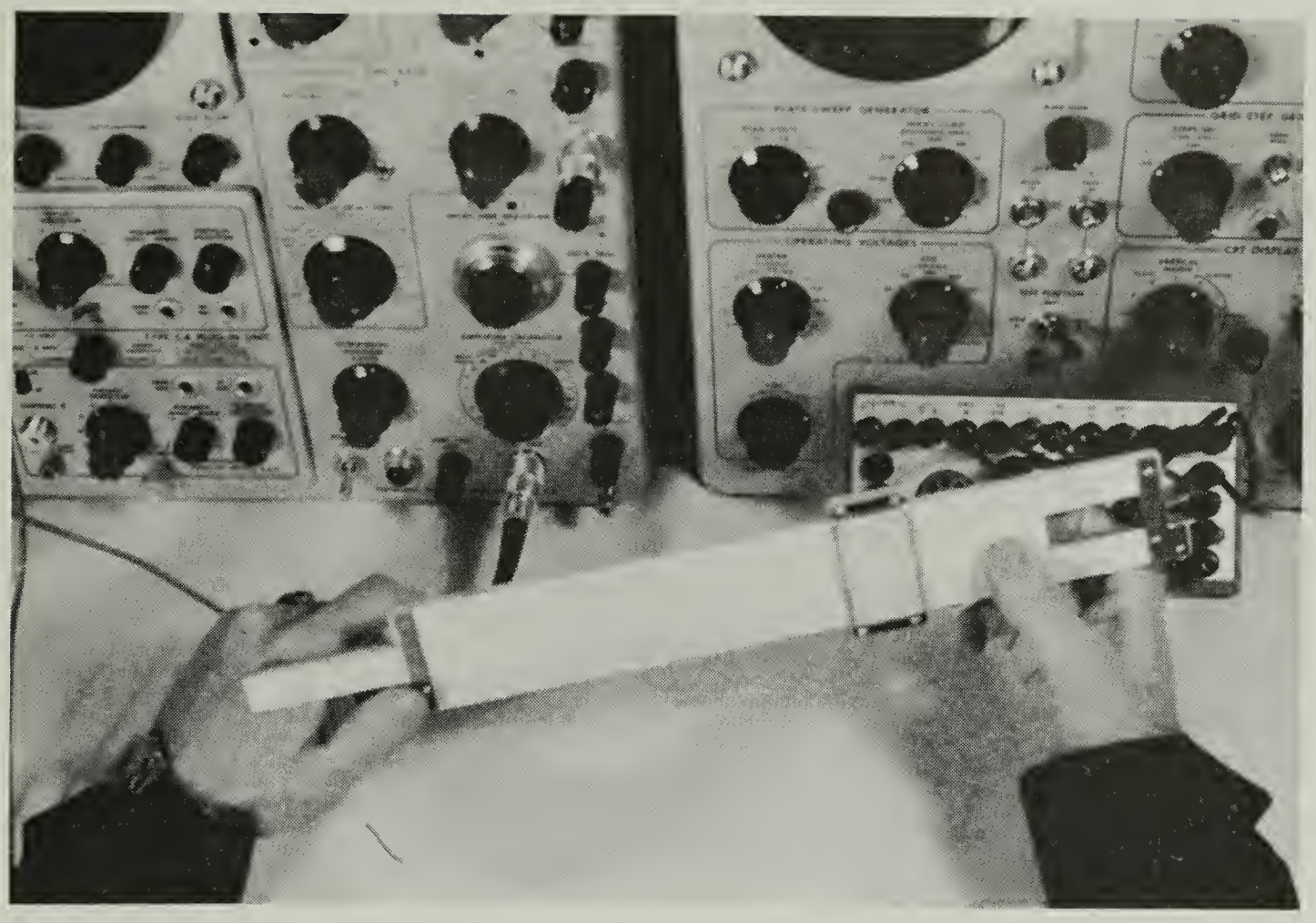
Ray Hayes, *Division Chairman*

The Electric Line Trade program is 11 weeks in duration and provides the opportunity for persons interested in Electric Line work to learn the basic knowledge and skills needed in the trade.

The following objectives are established for the Electric Line Trade curriculum:

1. To provide an opportunity for the trainee to receive organized and supervised classroom and field training in the trade.
2. To develop within the trainee correct and safe habits and techniques of using the tools and equipment of the trade.
3. To teach the trainee the technical manipulative skills necessary to perform the jobs and operations of the electric line trade.
4. To teach the trainee the importance of good job planning enabling him to develop accuracy and efficiency of operation.
5. To present to the trainee a variety of experiences and problems to develop his ability to meet and cope with those problems he will encounter in the trade.
6. To develop the trainee self-reliance, initiative, judgment and the proper attitude for accepting individual responsibility.
7. To develop in the trainee a willingness to accept instruction and supervision, and to respect his fellow workers.
8. To provide training in basic first aid and artificial respiration.

Many job opportunities await the graduate of this program.



ENGINEERING TECHNOLOGY—ELECTRONICS

Ralph B. Leach, *Division Chairman*

The field of electronics has developed at a rapid pace since the turn of the century. For many years the major concern of electronics was in the area of communications. Developments during World War II and in the period since have revolutionized production techniques. New industries have been established to supplement the need and demand for electronics equipment.

Many opportunities exist for men and women with a technical education in electronics. This curriculum provides a basic background in electronic related theory with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may take their place as an assistant to an engineer, or as a liaison between the engineer and the skilled craftsman.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance or sales. He may be an assistant to an engineer, an engineering aide, laboratory technician, supervisor or equipment specialist. His training is similar to that of an engineer, but in less depth and more practical in application. He can function as a liaison between an engineer and the skilled craftsman.

ELECTRONICS TECHNOLOGY

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
MA	301	Technical Mathematics	5
PHY	301	Physics: Properties of Matter	4
ENG	301	Communicative Skills: Reading Improvement	2
DD	307	General Drafting	3
ELEC	310	Direct Current Electricity	8
			22
SECOND QUARTER			
MA	302	Technical Mathematics	5
PHY	302	Physics: Work, Energy, Power	4
ENG	302	Communicative Skills: English	3
ELEC	311	Alternating Current Electricity	8
			20
THIRD QUARTER			
MA	303	Technical Mathematics	5
ENG	303	Communicative Skills: Technical Writing	3
SOC	301	Human Relations	2
ELN	312	Electronics I	9
			19
FOURTH QUARTER			
MA	304	Technical Mathematics	3
PHY	304	Physics: Light and Sound	4
ENG	304	Communicative Skills: Speech	2
ELN	313	Electronics II	12
			21
FIFTH QUARTER			
ISc	301	Industrial Organization and Management	3
ELN	316	Transistor Applications	7
ELN	317	Communications and Ultra High Frequency	4
ELN	318	Special Circuitry	7
			21
SIXTH QUARTER			
SOC	302	Economics	3
ELN	319	Instrumentation	8
ELN	320	Circuit Analysis and Maintenance	8
			19

ENGINEERING TECHNOLOGY—MECHANICAL DRAFTING AND DESIGN

Robert E. Pittman, *Division Chairman*

This curriculum guide was prepared for the purpose of outlining a training program for students of drafting and design technology. There are certain identifiable duties which are common to all technicians of this general classification and which comprise the basic areas of technical knowledge they need. This curriculum has been designed for training persons in the accepted performance of these basic duties that will be assigned, and to enable the individual student to become proficient in a short time after he becomes employew in theindustry.

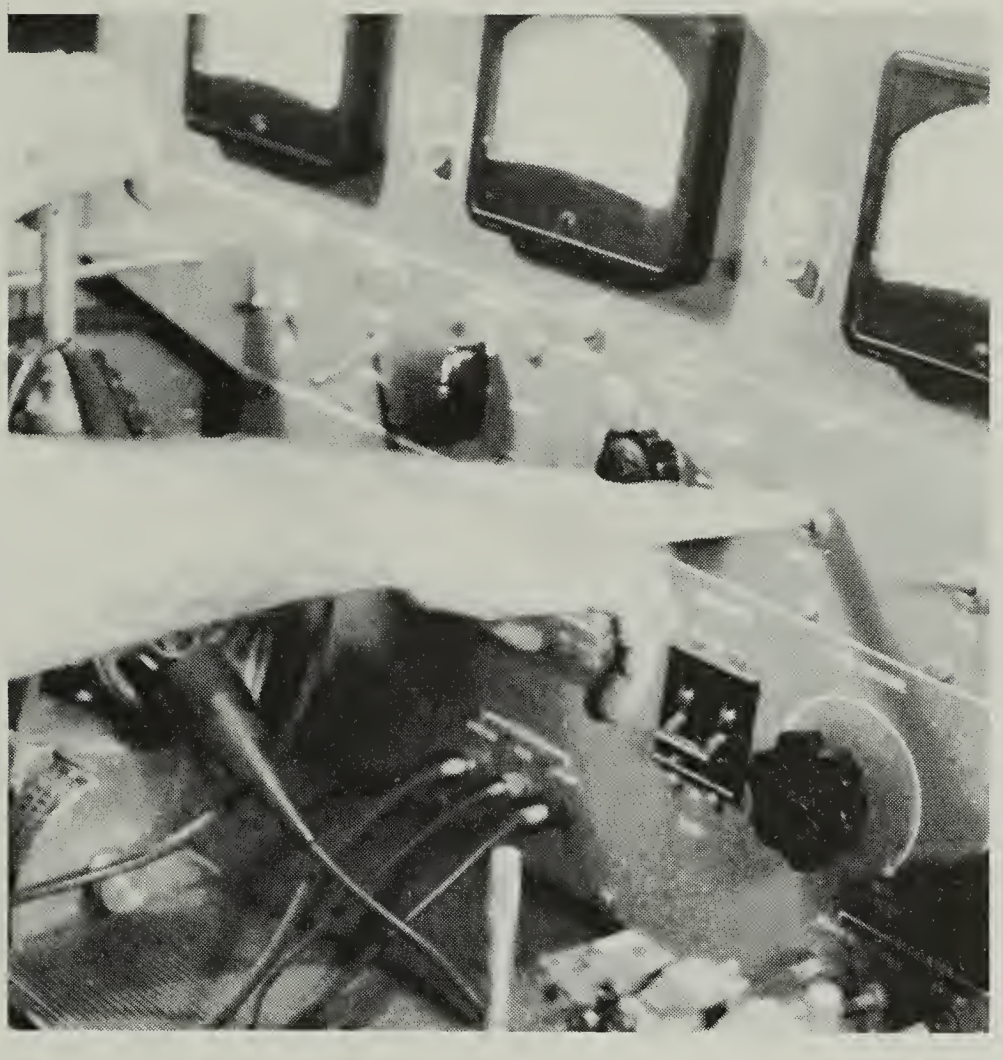
Courses in general education have been included to give a student the assurance that comes with education upon a broad base. The technician associates with many levels of thought and expression—administrative personnel, scientists, engineers, skilled workmen—and must be able to communicate effectively with all levels. Courses in the skills of communicaton, human relations, economics and the field of industrial organization, and management have been provided to assist the student to develop understanding and confidence. Courses containing essential information from related subject areas, such as mathematics, physics, and mechanics have been included in order to provide the student a better academic base for his training.

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and items for production use.

These technicians perform many aspects of design in a specialized field, such as the developing of the design of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They also design units and controls from specifications by utilizing drawings of existing units and reports on functional performance or design components in industrial fields based in engineers' original design concepts or specific ideas. They are asigned as coordinators for the execution of related work of other design, production, tooling, material and planning groups. Technicians in this classification will often supervise the preparation of working drawings.

MECHANICAL TECHNOLOGY—DRAFTING AND DESIGN

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
DD	301	Technical Drafting	4
MA	301	Technical Mathematics	5
ENG	301	Communicative Skills: Reading Improvement	2
PHY	301	Physics: Properties of Matter	4
MECH	301	Materials, Tools and Processes	3
			18
SECOND QUARTER			
DD	302	Technical Drafting	4
MA	302	Technical Mathematics	5
ENG	302	Communicative Skills: English	3
PHY	302	Physics: Work, Energy, Power	4
MECH	302	Materials, Tools and Processes	3
			19
THIRD QUARTER			
DD	303	Technical Drafting	4
MA	303	Technical Mathematics	5
ENG	303	Communicative Skills: Technical Writing	3
PHY	303	Physics: Electricity	4
MECH	303	Materials, Tools and Processes	3
			19
FOURTH QUARTER			
DD	304	Technical Drafting	4
DD	310	Descriptive Geometry	4
ENG	304	Communicative Skills: Speech	2
ELN	301	Industrial Controls	4
MECH	304	Metallurgy	4
			17
FIFTH QUARTER			
DD	305	Design Drafting I	4
MECH	305	Strength of Materials	4
PHY	305	Hydraulics and Pneumatics	4
DD	311	Mechanisms	4
			16
SIXTH QUARTER			
DD	306	Design Drafting II	6
DD	312	Jig and Fixture Design	4
SOC	302	Economics	3
ISc	301	Industrial Organization and Management	3
SOC	301	Human Relations	2
			18



POWER MECHANICS—AUTOMOTIVE

H. Earl Hardison, *Division Chairman*

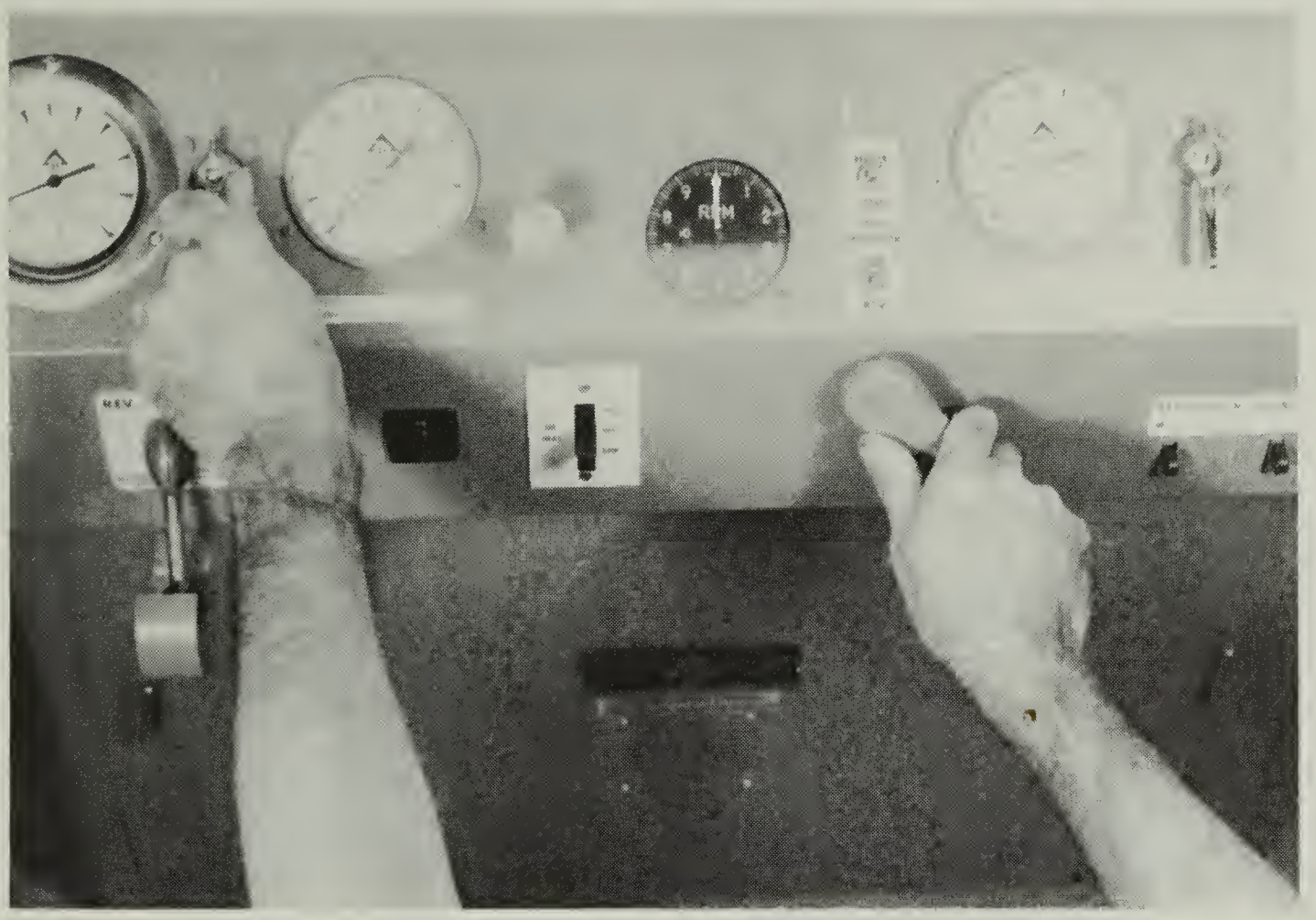
This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

AUTOMOTIVE

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AUTO	121	Automotive Engines	7
MA	120	Fundamentals of Mathematics	5
ENG	101	Reading Improvement	2
PHY	104	Applied Physics I	2
			16
SECOND QUARTER			
AUTO	122	Automotive Electronic and Fuel Systems	7
PHY	105	Applied Physics II	2
ENG	102	Communicative Skills	2
DD	121	Blueprint Reading	3
			14
THIRD QUARTER			
AUTO	123	Auto Chassis and Suspension	7
AHR	101	Auto Air Conditioning	3
SOC	101	Human Relations	2
PHY	106	Applied Physics III	2
MECH	112	Welding	1
			15
FOURTH QUARTER			
AUTO	124	Auto Power Train Systems	6
SOC	103	Management Procedures	3
AUTO	125	Auto Servicing	6
			15
ELECTIVES			
AUTO	126G	Auto Testing Equipment	7
AUTO	128G	Advanced Power Train Systems	4
AUTO	129G	Service Management Techniques	3



POWER MECHANICS—DIESEL

H. Earl Hardison, *Division Chairman*

Diesel mechanics keep bulldozers, tractors, and other diesel-powered equipment that is widely used on highways, on farms, and in industry in good operating order. Many diesel mechanics specialize in maintenance and repair of diesel equipment; others specialize in rebuilding engines. Those who do maintenance and repair work perform the periodic cleaning, adjusting, and tuneups that are necessary for efficient operation of diesel engines. Mechanics who specialize in rebuilding diesel engines that have been operated for many hours or miles, take the entire engine apart, examine all of the parts for defects, and repair or replace defective parts. They then reassemble and adjust the engine.

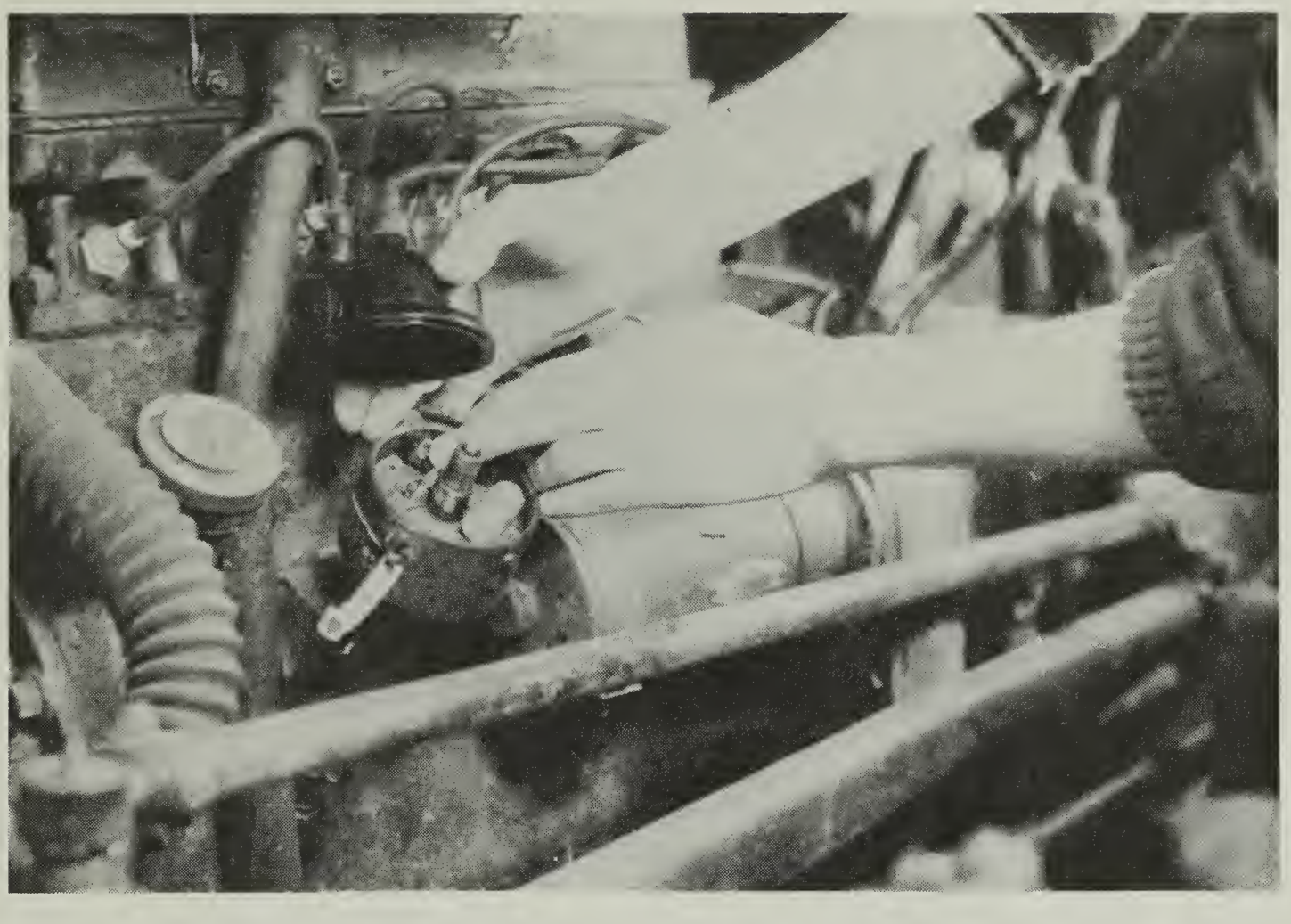
Diesel mechanics are taught proper use of handtools such as pliers, wrenches, and screwdrivers in their work. In addition, they are trained to use complex electronic testing equipment such as the dynamometer, which measures engine power, and mechanical lifting devices such as hoists. They are also taught to use machine tools such as grinders, drills, and lathes to make replacement parts for diesel-powered equipment.

An increasing number of diesel mechanics will be needed in the 1960's to maintain and repair the growing number of diesel engines used in American industry and commerce and on the roads and farms of the country.

The use of diesel engines to power farm and construction machinery, electric generators, trucks, buses, trains, automobiles and ships has been increasing. Many job openings in this field will be filled by mechanics who have had advanced training in diesel mechanics.

DIESEL

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AUTO	121	Automotive Engines	7
MA	120	Fundamentals of Mathematics	5
ENG	101	Reading Improvement	2
PHY	104	Applied Physics I	2
			16
SECOND QUARTER			
AUTO	122	Automotive Electrical and Fuel Systems	7
PHY	105	Applied Physics II	2
ENG	102	Communication Skills	2
DD	121	Blueprint Reading	3
			14
THIRD QUARTER			
AUTO	123	Automotive Chassis and Suspensions	7
DS	141G	Diesel Engine	3
SOC	101	Human Relations	2
MECH	112	Welding	1
PHY	106	Applied Physics III	2
			15
FOURTH QUARTER			
AUTO	124	Automotive Power Train Systems	6
DS	142G	Diesel Engine Components	3
AUTO	125	Automotive Servicing	6
			15
FIFTH QUARTER			
DS	143G	Fundamentals of Diesel Engine Work	5
DS	144G	Diesel Engine Maintenance and Repair	11
SOC	103	Management Procedures	3
AHR	101	Automotive Air Conditioning	3
			22



POWER MECHANICS—TRACTOR

H. Earl Hardison, *Division Chairman*

The history of the development and introduction of farm machinery is largely the history of what we call "modern civilization". The introduction of tools to cultivate the soil and lighten the labor of the farmer was immediately reflected in an improvement of the standard of living. The major factor in this growth and development has been the replacement of horsepower by power developed from gasoline and electricity.

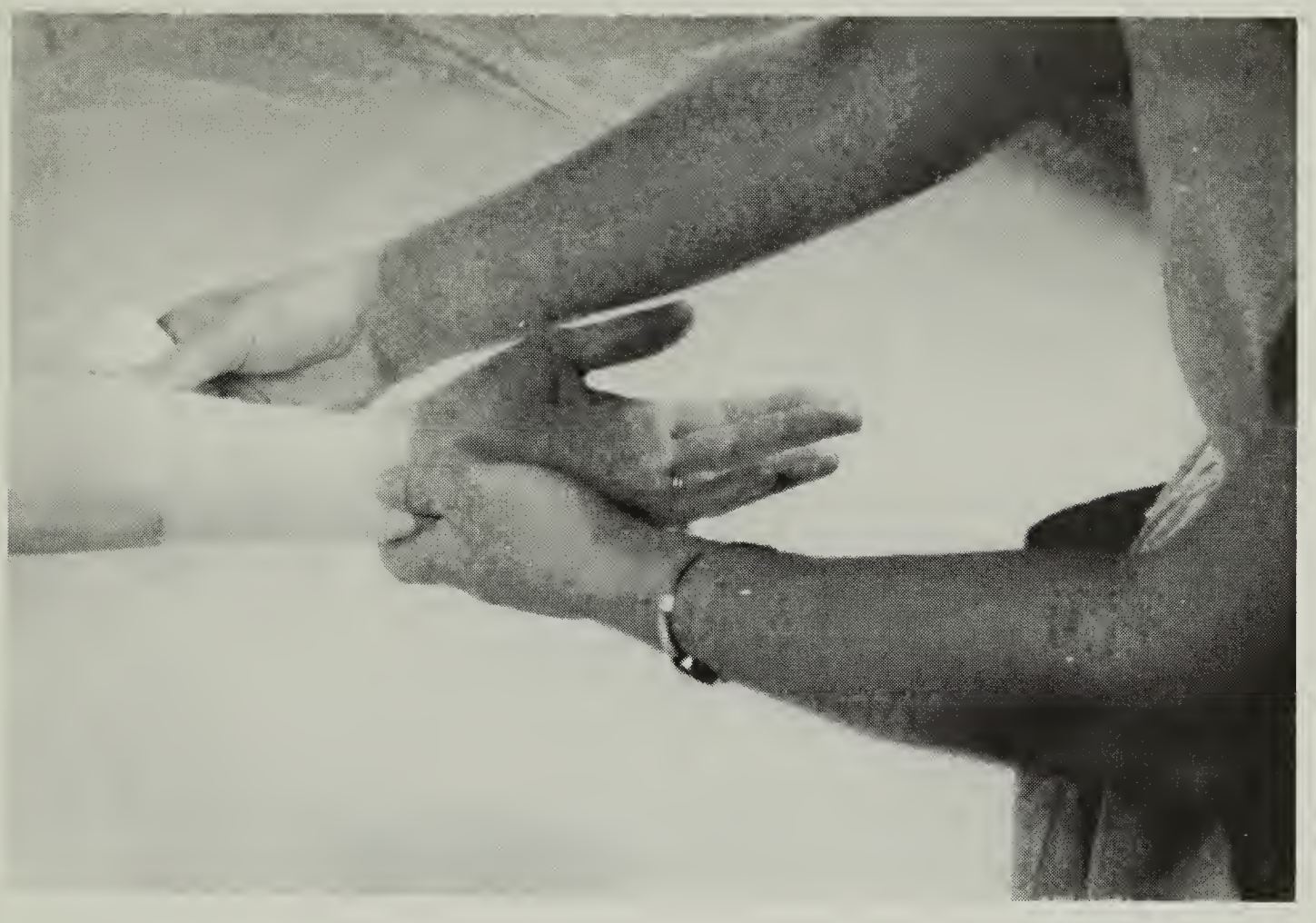
As agriculture has become mechanized the need for trained specialists has increased. The hoe and scythe or the horse-drawn plow and rake required little repair or service that could not be provided on the farm. Modern machinery, however, is complicated and intricate and its general adoption and widespread use have created new areas of business opportunity.

This program is organized to provide a broad training to permit entrance into the field best suited to the interest and aptitude of the graduate. Emphasis is placed on the basic fundamental theory and related laboratory and shop techniques with specialization to be developed later in employment.

Graduates of this program can quickly adapt themselves for employment in the areas of sales, service, distribution, installation and maintenance. They may estimate cost and plan equipment installations or provide the service that must be done, not in the factory, but in the field, and done by personnel who thoroughly understand the problems of the farmer-purchaser.

TRACTOR

		Course Title	*Quarter Hours Credit*
FIRST QUARTER			
AG	110	Farm Machinery Engines	7
MA	120	Fundamentals of Mathematics	5
ENG	101	Reading Improvement	2
PHY	104	Applied Physics I	2
			16
SECOND QUARTER			
AG	111	Farm Machinery Electrical Systems	7
DD	121	Blueprint Reading	3
ENG	102	Communication Skills	2
PHY	105	Applied Physics II	2
WELD	121	Welding	2
			16
THIRD QUARTER			
AG	112	Farm Machinery Fuels and Fuel Systems	5
AG	113	Farm Machinery Hydraulics	7
PHY	106	Applied Physics III	2
			14
			16
FOURTH QUARTER			
AG	114	Farm Machinery Power Train Systems	4
AG	115	Farm Machinery Suspension Systems	3
AG	116	Farm Machinery Service	4
SOC	101	Human Relations	2
SOC	103	Management Procedures	3
			16
ELECTIVES			
DS	143G	Fundamentals of Diesel Engine Work	5
DS	144G	Diesel Engine Maintenance and Repair	11
DS	141G	Diesel Engine Description and Principles	3
DS	142G	Diesel Engine Components	3
			22



PRACTICAL NURSING

Mrs. Jeanne W. Boykin, *Division Chairman*

The Licensed Practical Nurse is one who is prepared to meet the daily needs of the patient whose condition is relatively stable and to assist the Registered Nurse and/or Physician to meet the daily needs of the patient whose condition is unstable or complex.

Practical Nursing is an attractive, well paid, dignified career offering opportunity for service. Positions for the graduate licensed practical nurse far exceed the number of qualified persons available to fill them.

Work opportunities are not limited. Graduates may secure employment in hospitals, clinics, physicians' offices and convalescent homes. They are also eligible to take the Federal Civil Service Examination which entitles them to seek employment in government hospitals.

Established in 1950, the Goldsboro Program of Practical Nurse Education is a department of the Wayne Technical Institute. It is administered under the supervision of the Technical Institute and is affiliated at the Wayne County Memorial Hospital where the students receive their clinical practice. The primary purpose of this program is to provide education and training opportunity to interested and qualified persons who seek to become Licensed Practical Nurses.

PRACTICAL NURSING

Course Title	*Quarter Hours Credit*
FIRST QUARTER	
Practical Nursing I	22
SECOND QUARTER	
Practical Nursing II	21
THIRD QUARTER	
Practical Nursing III	17
FOURTH QUARTER	
Practical Nursing IV & V	17

THE PSYCHIATRIC NURSE'S AIDE

Statistics reveal that more than 500,000 people become mentally ill every year. These victims suffer much distress. The lack of understanding and treatment of mental disorders by unqualified employees have contributed to the "costly lag" in this field.

It is apparent that a course, offering basic knowledge of mental illnesses and beginning skills for giving personal and therapeutic care, is needed for those persons who are entering this area of health occupations.

The course is designed to prepare both men and women to work as Nurses' Aides in a general hospital, a clinic, a private home or a nursing home, as well as any hospital or clinic offering treatment for the mentally disturbed.

The course, which is eleven weeks in length, consists of both classroom instruction and work experience.

The course of instruction is divided into eight units:

1. Introduction to Health Services.
2. Meeting Daily Physical Needs of Patients.
3. Assisting with Problems Related to Patient's Needs.
4. Nursing Procedures.
5. Procedures Related to Change in Patient Placement.
6. Meeting Mental and Emotional Needs of Patients (Human behavior, common adjustments, interpersonnel relations).
7. Nursing Care of Psychiatric Patients.
8. Becoming a Hospital Employee.

Upon completion of the course of instruction, the student will receive a certificate.

COURSE DESCRIPTIONS

AGRICULTURE (AG)

AG 110 Farm Machinery Engines

An introduction to farm machinery. Tractor and other farm machinery engines maintenance including: shop procedures, safety, repair tools, tune-up and engine testing equipment. Study of the construction and operation of components of farm equipment engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing. Prerequisite: None. Credit 7

AG 111 Farm Machinery Electrical Systems

Intensive training in components and operation of tractor electrical systems. Fundamentals of electricity and magnetism and their application to tractor engine electrical systems; batteries, ignition systems, cranking motors, generators and regulators. Prerequisite: AG 110. Credit 7

AG 112 Farm Machinery Fuels and Fuel Systems

A thorough study of fuels and fuel systems of gasoline and diesel tractors. Characteristics of fuels, principles and fundamentals of combustion, carburetion, fuel injection, and engine speed governing. Prerequisite: AG 110. Credit 5

AG 113 Farm Machinery Hydraulics

A concentrated investigation of tractor hydraulic systems consisting of hydraulic principles and components of various hydraulic systems. Hydrostatics, basic circuits, fluids, hydrodynamics and automatic draft control. Identification of trouble, servicing, and repair. Prerequisite: AG 110. Credit 7

AG 114 Farm Machinery Power Train Systems

Principles and functions of tractor power train systems: clutches, bearing, shafts, and cases, gears and gear trains, differentials, final drives, and planetary systems. Prerequisite: AG 110. Credit 4

AG 115 Farm Machinery Suspensions and Implements

Principles and functions of the components of tractor suspensions. Practical instructions in adjustment and repair of suspension, steering, braking, and hitching systems.

Assembly, adjustment, operation, maintenance and repair of tractor-drawn and mounted equipment. Students will receive instruction in principles of operation and diagnosis and correction of troubles in tillage, planting and seeding, pest control and harvesting equipment. Prerequisite: AG 110. Credit 3

AG 116 Farm Machinery Service and Repair

Opportunity for the student to practice principles and techniques learned in previous courses by means of service and repair work that can be made

available. A close simulation to an actual farm machinery shop situation will be maintained, and effort will be made to give the student a full range of testing and servicing experience under both shop and field conditions. Prerequisite: AG 110. Credit 4

AG 304 Recreation

Principles and problems involved in the utilization of our natural resources for recreational purposes. Prerequisite: None. Credit 3

AG 306 Farm Chemicals

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control. Prerequisite: None. Credit 6

AG 310 Introduction to Agricultural Economics

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms. Prerequisite: None. Credit 6

AG 312 Agricultural Marketing

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market structure and the relationship of local, terminal, wholesale, retail and foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco. Prerequisite: AG 310. Credit 6

AG 314 Farm Business Management

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager. Prerequisite: AG 310. Credit 7

AG 322 Agricultural Prices

An introduction to the functions of prices in our economic system and the effects of changing price levels. The influence consumer demand has on prices through price and income elasticities. A review of the influences of cycles and timing of production, with an examination of the use of future commodity contracts. Application of the principles of price analysis to price control and parity programs. Familiarization with the various tools widely used in historical analysis and forecasting. Prerequisite: AG 310. Credit 4

AG 326 Agricultural Programs and Agencies

A review of the public agriculture programs and agencies that provide services for agricultural producers. The objectives, organization, functions, and services of these organizations. Prerequisite: AG 310. Credit 4

AG 342 Farm Mechanization

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems and other labor-saving devices. Prerequisite: None. Credit 4

AG 370 Animal Science

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing and marketing of livestock. Prerequisite: None. Credit 6

AG 372 Animal Nutrition

A course dealing with the principles of nutrition and their application to feeding practices of cattle, horse, sheep and swine production in North Carolina. Prerequisite: AG 370. Credit 3

AG 374 Dairy and Beef Production

A study of the principles of selection, breeding, feeding, care and management of dairy and beef cattle. Prerequisite: AG 370. Credit 6

AG 380 Livestock Diseases and Parasites

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases; and management factors relating to disease and parasite prevention and control. Prerequisite: AG 370. Credit 3

AG 388 Swine Production

Development of the swine production and marketing industries; principles and practices of selection, breeding, feeding, housing, marketing and management of swine. Prerequisite: AG 370. Credit 4

AG 389 Wildlife Science

An introduction to the major principles of wildlife management. Includes the study of selected birds, game animals, and fish, fish pond management, plants of value to wildlife, and laws governing wildlife. Prerequisite: None. Credit 3

AG 400 Farm Forestry

A course dealing with the fundamentals of forestry and farm forestry problems. Prerequisite: None. Credit 4

AG 420 Plant Science

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed bearing plants with application to certain commercially important plants in North Carolina. Prerequisite: None. Credit 6

AG 423 General Bacteriology

A general bacteriology course dealing with the structure, development and function of bacteria and other micro-organisms. Emphasis on those or-

ganisms associated with water and the role of micro-organisms in nature. Prerequisite: None. Credit 4

AG 426 Pastures and Forage Crops

A course dealing with the fundamentals of pastures and forage crops and management. A study of the major grasses and legumes of economic importance in North Carolina. Prerequisite: AG 420. Credit 3

AG 428 Weed Identification and Control

A study of the identification and control of the annual and perennial weeds of economic importance in North Carolina. Prerequisite: None. Credit 5

AG 460 General Poultry Science

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the breeding principles; the principles of incubation, brooding, rearing, feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control. Prerequisite: None. Credit 6

AG 462 Poultry Housing and Equipment

An analysis of the principles of poultry housing and ventilation. The use of automatic ventilation equipment and popular brooding equipment. Automatic feeding and watering system. Egg washing equipment. High density brooding and laying houses. Automatic egg collectors. Feed mixing equipment. Hatchery equipment and management. Prerequisite: AG 460. Credit 4

AG 464 Poultry Enterprise

A review of the growth of the various poultry enterprises, including market eggs, hatching eggs, and broiler production; marketing procedures; determining and controlling costs of production; choosing breeds and determining flock size, feeding systems, conversion ratios, labor efficiency, and other management factors. Prerequisite: AG 460. Credit 6

AG 466 Marketing Poultry Products

A summary of the latest processing and marketing methods for poultry products. Grading, processing, packing, storing, and marketing shell eggs. The egg products industry. Processing, grading, packing and merchandising poultry meat. Prices and market information. Promotion and advertising of poultry products. Egg and poultry legislation. Prerequisite: AG 460. Credit 4

AG 468 Poultry Health

The principles and practices of poultry disease and parasite prevention and control. The mortality problem and the nature of disease. The types of organisms causing poultry diseases. The methods of disease prevention and control. Nutritional disorders and miscellaneous conditions. The major poultry diseases. Prevention and control of internal and external parasites: Controlling flock mortality. Prerequisite: AG 460. Credit 4

AG 490 Soil Science

Soil types; basic principles of efficient management of soils and the growing of crops; care and cultivation of the soil, fertilization and conservation of soil fertility. Prerequisite: None. Credit 5

AG 494 Soil Fertility

A course dealing with soil fertility principles. The application of these principles to the North Carolina soils, fertility evaluation and soil conservation practices. Prerequisites: AG 490. Credit 4

AG 495 Soil Classification

A study of the classification of soils and the interpretation and evaluation of soil classification in determining soil management practices. Origin of soil; soil profile properties; soil survey program, soil maps. Field study of selected soil series. Prerequisite: None. Credit 3

AG 497 Soil Conservation I

An introduction to soil conservation, covering what is included in soil and water conservation, the public interest in soil and water conservation, who is involved in soil and water conservation, the available resources to carry out soil and water conservation measures, and the relationship of specialized knowledge in Agronomy, Biology, Economics, Engineering, Soils, Forestry and Recreation. Prerequisites: AG 420, AG 490. Credit 5

AG 498 Soil Conservation II

This includes principles of rendering assistance in conservation planning, procedures for preplanning in conservation planning, actual assistance in planning the conservation program, and actual assistance in laying out and designing conservation programs. This involves working with individual landowners on specific soil and water conservation problems, and in determining correct alternatives for treatment. Prerequisite: AG 497. Credit 5

AG 499 Soil Conservation III

A detailed study and on-site training, covering the proper servicing of conservation plans, revising plans, keeping plans current and up to date, maintenance of conservation measures applied to the land, and the procedure for keeping plans abreast of the times. Prerequisites: AG 497, AG 498. Credit 5

AIR CONDITIONING AND HEATING

AHR 101 Automotive Air Conditioning

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system. Prerequisite: PHY 105. Credit 3

AUTOMOTIVE

AUTO 121 Automotive Engines

Development of a thorough knowledge and ability in using, maintaining and storing the various hand tools and measuring devices needed in automotive repair work. Study of the construction and operation of components of automotive engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing. Prerequisite: None. Credit 7

AUTO 122 Automotive Electrical and Fuel Systems

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system. Prerequisite: AUTO 121. Credit 7

AUTO 123 Automotive Chassis and Suspensions

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension, steering and braking systems. Units to be studied will be shock absorbers, springs steering systems, steering linkage, front end, types and servicing of brakes. Prerequisite: AUTO 122. Credit 7

AUTO 124 Automotive Power Train Systems

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair. Prerequisites: PHY 105, PHY 106, AUTO 123. Credit 6

AUTO 125 Automotive Servicing

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of testing, adjusting, repairing and replacing experiences. Prerequisite: AUTO 123. Credit 6

AUTO 126G Automotive Testing Equipment

A comprehensive study of all automobile testing equipment, as well as the correct procedures for its use in the automotive shop. The student will be expected to utilize information derived from the equipment to diagnose automotive problems. Prerequisite: AUTO 122. Credit 7

AUTO 128G Advanced Power Train Systems

This course is designed to help the student to specialize in the field of automatic transmissions. Credit 4

AUTO 129G Service Management Techniques

The students are introduced to the management aspect of the modern garage. Cost estimating and flat rate manuals are studied, along with scheduling and planning. Good business practices are continuously emphasized. Shop design and layout, along with high maintenance standards are also stressed. Credit 3

BUSINESS

BUS 301 Introduction to Business

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management. Prerequisite: None. Credit 3

BUS 302 Typewriting

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Minimum speed of 30 Net words per minute for five minutes. Prerequisite: None. Credit 3

BUS 303 Typewriting

Instruction emphasized the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Minimum speed of 40 net words per minute for five minutes. Prerequisite: BUS 302 or a net speed of 30 words per minute for five minutes. Credit 3

BUS 304 Typewriting

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Minimum speed of 50 net words per minute for five minutes. Prerequisite: BUS 303 or a net speed of 40 words per minute for five minutes. Credit 3

BUS 306 Shorthand

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases. Minimum dictation rate of 40 words per minute on new material for five minutes. Prerequisite: None. Credit 3

BUS 307 Shorthand

Continued study of theory with greater emphasis on dictation for transcription. Minimum dictation rate of 60 words per minute required for five minutes on new material. Prerequisite: BUS 306 or a dictation rate of 40 words per minute on new material for five minutes. Credit 3

BUS 308 Shorthand

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Minimum dictation rate of 80 words per minute required for five minutes on new material. Prerequisite: BUS 307. Credit 3

BUS 316 Retailing

A study of the role of retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends. Prerequisite: None. Credit 3

BUS 317 Sales Development

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required. Prerequisite: None. Credit 4

BUS 319 Credit Procedures and Problems

Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection are included. Prerequisite: None. Credit 3

BUS 320 Accounting

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting—collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: None. Credit 6

BUS 321 Accounting

Partnership and corporation accounting including a study of the payrolls, Federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control, rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: BUS 320. Credit 6

BUS 322 Accounting

Thorough working knowledge of concepts used in preparation and interpretation of financial statements. Each item of the income statement and balance sheet is carefully analyzed. Prerequisite: BUS 321. Credit 6

BUS 323 Cost Accounting

Nature and purposes of cost accounting; accounting for direct labor, materials, and factory burden; job cost, and standard cost principles and procedures; selling and distribution costs; budgets, and executive use of cost figures. Prerequisite: BUS 320, 321, 322 and 374. Credit 4

BUS 327 Advertising

The role of advertising a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media. Prerequisite: None. Credit 4

BUS 328 Business Insurance

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included. Prerequisite: None. Credit 3

BUS 332 Sales Promotion Management

The scope and activities of sales promotion with emphasis on the coordination of advertising, display, special events, and publicity. External and internal methods of promoting business; budgeting, planning, and implementing the plan. Prerequisite: BUS 327. Credit 4

BUS 333 Personnel Management

Principles of human relationships; selection of personnel by interviewing and testing; and training of personnel. Prerequisite: None. Credit 3

BUS 335 Business Management

Principles of business management including a view of major functions of management such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making functon versus the operating function. Role of Management in business—qualifications and requirements. Prerequisite: None. Credit 3

BUS 337 Wholesaling

The development of wholesaling; present day trends in the United States. A study of the functions of wholesaling. Prerequisite: None. Credit 3

BUS 339 Marketing

A study of the marketing structure within the framework of the U. S. economic system. It includes the study of the movement of goods from producer to consumer through various channels of distribution, the functions of marketing, the social and economic implications. Prerequisite: None. Credit 3

BUS 340 Secretarial Procedures

Designed to acquaint the student with the responsibilities encountered by a secretary during the workday. These include the following: receptionist duties, filing, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims. Prerequisite: None. Credit 3

BUS 350E Advanced Typewriting (Business)

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, reports, and manuscripts. Prerequisite: BUS 304. Credit 3

BUS 351 Business Law

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, partnerships, corporations, and agencies. Prerequisite: None. Credit 3

BUS 352 Business Law

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 351. Credit 3

BUS 353 Business Law

A study of the powers, policies, methods, and procedures used by the various Federal, State and local administrative agencies in promoting and regulating business enterprises. It includes a consideration of the constitutional and statutory limitations on these bodies and judicial review of administrative action. Prerequisite: BUS 351 and 352. Credit 3

BUS 355 Interpreting Accounting Records

Designed to aid the student in developing a "use understanding" of accounting records, reports and financial statements. Interpretation, analysis, and utilization of accounting statements. Prerequisite: BUS 320. Credit 3

BUS 356E Dictation and Transcription (Business)

Develops the skills of taking dictation and transcribing materials appropriate to the course of study, which includes a review of the theory and the dictation of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Prerequisite: BUS 308. Credit 4

BUS 357E Dictation and Transcription (Business)

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business, technical and professional offices. Prerequisite: BUS 356. Credit 4

BUS 358E Dictation and Transcription (Business)

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on neatness as well as accuracy. Prerequisite: BUS 357. Credit 4

BUS 360 Office Machines

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, calculator, and duplicating equipment. Prerequisite: None. Credit 3

BUS 361 Office Machines

Instructions in the operation of the bookkeeping-accounting machines, card punch, card verifier, and the dictating and transcribing machines. Prerequisite: BUS 360. Credit 3

BUS 364 Business Finance

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of the organization, management, and financing of businesses. Prerequisite: None. Credit 3

BUS 365 Business Finance

An advanced course designed to give the student practical knowledge of the different kinds of stocks and bonds, mortgages, working capital, sinking funds, capitalization, sales of securities, surplus and dividends. Prerequisite: BUS 364. Credit 3

BUS 366 Budget and Record Keeping

The basic principles, methods, and procedures for preparation and operation of budgets. Special attention is given to the involvement of individual departments and the role they play. Emphasis on the necessity for accurate record keeping in order to evaluate the effectiveness of budget planning. Prerequisite: BUS 320. Credit 3

BUS 368 Taxes

Application of Federal and State taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance. Prerequisite: None. Credit 3

BUS 369 Auditing

Principles of conducting audits and investigations; setting up accounts based upon audits; collecting data on working papers; arranging and systemizing the audit, and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control. Prerequisites: BUS 320, 321, 322, and 374. Credit 3

BUS 370E Office Application (Business)

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for six hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned, according to the course of study. Prerequisite: BUS 361. Credit 6

BUS 371 Office Management

Presents the fundamental principles of office management. Emphasis on the role of office management; office automation; planning, controlling, organizing and actuating in office management. Prerequisite: BUS 340. Credit 3

BUS 372 Principles of Supervision

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed. Prerequisite: None. Credit 3

BUS 374 Advanced Accounting

Advanced accounting theory and principles as applied to special accounting problems, bankruptcy proceedings, estates and trusts, consolidation of statements, parent, and subsidiary account. Prerequisites: BUS 320, 321, and 322. Credit 4

BUS 375 Machine Accounting

The application of various types of machines to accounting, statistical, and payroll work based on the principles of double entry accounting using the punch-card system. Visits to local installations with these types of machines. Prerequisite: BUS 374. Credit 4

BUS 383E Terminology and Vocabulary (Business)

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices. Prerequisite: BUS 307. Credit 3

CHEMISTRY

CHEM 301 Chemistry

Study of the physical and chemical properties of substances; chemical changes; elements, compounds, gases, chemical combinations; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions. In addition, study of carbohydrates; electrochemistry, electrolytes, and electrolysis in their application of chemistry to industry. Prerequisite: None. Credit 4

CHEM 302 Chemistry

General course in inorganic chemistry. Properties of acids, salts, bases, and solutions. Chemical and physical properties of selected inorganic elements are studied in detail. Laboratory work will consist of various inorganic tests and experiments. Prerequisite: CHEM 301. Credit 5

CHEM 304 Chemistry

General principles and theories of organic chemistry. Preparation, formulas and properties of the most important organic compounds, with a brief description of synthetic compounds of commercial value in addition to the main vitamins, antibiotics, and hormones. Prerequisites: CHEM 301, CHEM 302. Credit 5

CHEM 305 Agricultural Chemistry

Course dealing with the application of inorganic and organic chemistry principles to fertilizers, pesticides, and soil science. Pesticides formulation, testing, and properties. Soil and fertilizer methods of analysis used in North Carolina, and their interpretation. Prerequisites: CHEM 301, CHEM 302, CHEM 304. Credit 5

CIVIL ENGINEERING

CIV 310 Surveying I

Theory and practice of plans surveying including taping, differential and profile leveling, cross sections, earth work computations, transit, stadia, and transit-tape surveys. Prerequisites: MA 301, DD 307. Credit 4

5 qtr. hr. on reports of May 20, 1966

DATA PROCESSING

DP 311 Introduction to Data Processing Systems

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses. Prerequisite: None. Credit 4

DENTAL ASSISTING

DA 101G Dental Anatomy and Physiology

A lecture course to give the dental assistant a knowledge of the basic structures surrounding the teeth, formation of the deciduous and permanent teeth, basic anatomy of individual teeth and how to apply this anatomy to the caring of restorative patterns. Credit 2

DA 102G Bacteriology

To acquaint the dental assistant with the world of bacteriology, to show her how bacteriology and dental health are related, and to demonstrate techniques for successful coping with the bacteriological problems that arise in a dental office. Credit 1

DA 103G Oral Pathology

A study of the fundamental concepts of diseases and disease processes in the oral cavity in contrast to normal tissue response as seen in health. The more common diseases of both hard and soft tissues of the oral cavity will be discussed and illustrated with suitable slide material. Credit 1

DA 104G Introduction to Practice

This course presents the objectives, responsibilities, opportunities, and scope of service of the dental assistant in practice, including a consideration of the organizations associated with dentistry and dental assisting, terminology, and the ethics as well as the laws governing the practice of dentistry. Credit 1
Credit 1

DA 105G Clinical Orientation I

This identifies and orients the various restorative and clinical areas of service, including operative dentistry, prosthodontics, crown and bridge prosthodontics, pedodontics, periodontics, endodontics, oral surgery and anesthesia. The procedures for various operations involving instrumentation and materials, are presented in lectures and demonstration. The student will practice the procedures, including the use of materials and instruments, as it applies to dental assisting. Credit 7

DA 107G Clinical Orientation II

Continuation of DA 105G. Credit 7

DA 108G Clinical Practice I

This is the actual work experience performed by the assistant in the clinic. Instruction is under trained dental assistants and practicing dentists. The clinic has three completely equipped dental operatories. Credit 8

DA 109G Clinical Practice II

Continuation of DA 108G, including the admisson of patients and keeping of records. Credit 13

DA 110G Pharmacology—Diet and Nutrition

The first phase of the course deals with the common drugs and medicaments used in the dental office, their indications, dosage, methods of administration and storage. The second phase is designed to give a working knowledge of nutrition as it applies to everyday diets. Credit 1

DA 111G Dental Materials

The dental assistant learns through lectures and laboratory exercises to identify dental materials and evaluate their quality, to master the manipulation of various dental materials and to learn the problems encountered in storage of various dental materials. Credit 7

DA 112G Gross Anatomy and Physiology

To familiarize the student with the general anatomy of the body, the basic concepts of the normal functions of body systems and the normal physiology of various tissues in order that the requirements for maintaining an optimal general health might be better understood. Credit 1

DA 113G Personal Hygiene and Conduct

To give an understanding and practical application of personal hygiene and professional conduct, as related to the auxiliary personnel of the dental profession. Credit 1

DA 114G First Aid

First aid is necessary in all emergencies. The student learns to think and act quickly and clearly, and to institute immediate and/or temporary care in the event of emergencies. She learns the dental aspect of general first aid measures. Credit 1

DA 116G Equipment Care

The maintenance and care of dental equipment and instruments, as it applies to the dental assistant, will be covered. The latter procedures include the sharpening of instruments. Credit 1

DA 117G Roentgenology

The danger of X-rays and the handling of X-ray material is learned by the student so she can make intro-oral roetgenograms, process (develop), mount and file them so she may perform such duties for the dentist. Credit 2

DA 118G Supplies

Identification and study of supplies, materials, and records will be made. The procedures for ordering payment, and storage of supplies are covered. Credit 1

DA 119G Patient Management

A study will be made of applied psychology as related to the child and adult patient. Procedures involving patients and others in the reception room, operatory and business office will be covered. Credit 1

DA 120G Records

Patient, clinical and financial records, as well as various office records, are covered. The charting of patients' dental conditions and needs will be practiced, as well as the filing of all records. Credit 3

DA 190G Professional Leadership

Submission of papers suitable for publication and presentation of a table clinic gives the student an opportunity to develop leadership potentials in her chosen work. Credit 2

Personal Improvement

Conversation, personality, the figure and clothing are major topics for discussion to aid the assistant in her appearance and overall impression on others. Credit 3

DIESEL

DS 141G Diesel Engine Description and Principles

A general description of diesel engines, their characteristics, classification, cylinder arrangement and engine designation. The principle of operation, including timing, compression, combustion, scavenging, supercharging, piston speed and speed factors. Prerequisites: AUTO 121, AUTO 122. Credit 3

DS 142G Diesel Engine Components

The student will become familiar with and learn to identify each engine part by sight, and should learn their correct names and their particular functions. Prerequisite: DS 141. Credit 3

DS 143G Fundamentals of Diesel Engine Work

Theoretical knowledge of diesel fuels, fuel systems, lubrication, lubrication systems, cooling systems, air intake systems, starting and reversing methods, vibration and balancing. Prerequisites: DS 141, DS 142. Credit 5

DS 144G Diesel Engine Maintenance and Repairs

The student will disassemble and assemble the complete engine, start and operate the engine, make adjustments, and tests while engine is in operation. Prerequisites: DS 141G, DS 142G. Credit 11

DRAFTING AND DESIGN (DD)

DD 121 Blueprint Reading

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None. Credit 3

DD 126 Blueprint Reading for Masons

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residence or commercial buildings will be studied with emphasis on plot plans, basement plans and/or foundation plans, and various detail drawings of masonry work. Credit 3

DD 301 Technical Drafting

Introduction to drafting and design practices and principles. Attainment of basic skills and techniques of drafting: use of drafting equipment; lettering; freehand orthographic and pictorial sketching; geometric construction, orthographic instrument drawing of principal views; and standards and practices of dimensioning and noting. Methods of reproducing, filing, and storing drawings are studied and the student is introduced to "working drawings". Prerequisite: None. Credit 4

DD 302 Technical Drafting

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. The introduction of the graphical analysis of space problems involving points, lines, planes, and a combination of these elements. Precision and limit dimensioning practices. Prerequisite: DD 301. Credit 4

DD 303 Technical Drafting

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections, will be included. Prerequisite: DD 302. Credit 4

DD 304 Technical Drafting

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions and delineating. Prerequisite: DD 303. Credit 4

DD 305 Design Drafting I

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course. Prerequisites: DD 304, MA 302, PHY 303. Credit 4

DD 306 Design Drafting II

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem. Prerequisites: DD 305, DD 310. Credit 6

DD 307 General Drafting

An introductory course in drafting for students needing a knowledge of drawing principles and practices for reading and describing objects in the graphic language. The student is expected to gain basic skills in drawing with instruments, lettering, geometrical constructions, free hand sketching, and describing objects orthographically with principal views. Free hand sketching and orthographic reading are to be emphasized. Prerequisite: None. Credit 3

DD 310 Descriptive Geometry

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical vertification where applicable. Visualization shall be stressed on every problem. Prerequisites: DD 302, MA 302. Credit 4

DD 311 Mechanisms

Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and acceleration of points within link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains. Prerequisites: DD 304, MA 303, PHY 302. Credit 4

DD 312 Jig and Fixture Design

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design. Prerequisites: DD 305, DD 311. Credit 4

ELECTRICITY

ELEC 310 Direct Current Electricity

Basic electricity subjects include: structure of matter, electrical terminology and symbols, electron theory of current flow, magnets and magnetic fields. Rigorous mathematical analysis of direct current resistive circuits. Ohm's Law, Kirkchoff's Laws, Thevenin's Theorem, the Superposition Principle and loop current method. Solution of complex resistive networks. Fundamental principles of inductors, capacitors, and time constants circuits are introduced. Prerequisite: None. Credit 8

ELEC 311 Alternating Current Electricity

Alternating current and voltage: alternating current theory. Mathematical analysis is made of both sine and non-sine wave forms. Inductive reactance, capacitive reactance, and impedance characteristics of alternating current circuits are investigated. The use of vector and complex numbers in circuit impedance. Series and parallel resonant circuit conditions are compared and practical application of these conditions explained. Prerequisites: ELEC 310, MA 301, PHY 301. Credit 8

ELECTRONICS

ELN 301 Industrial Controls

Industrial controls is the study of modern methods of controlling machinery by electronic circuitry. Machinery controls and electronic mechanisms that automatically operate machines will be studied. Types of motors, generators, control signals and devices, thyretrons, gates, switches, and servomechanism circuits are major areas of study. Prerequisite: PHY 303. Credt 4

ELN 312 Electronics I

A treatment of electron tubes, semi-conductors and their associated circuitry; thermionic emission; diode, triode, tetrode and pentode characteristics. Theory of semi-conductor diode and transistor operation is studied in detail. Application of vacuum tubes and semi-conductors in power supplies, voltage amplifiers, power amplifiers, and the advantages and disadvantages of each considered. Prerequisites: ELEC 310, MA 301, PHY 301. Credit 9

ELN 313 Electronics II

Design and analysis of vacuum tube and transistor oscillators, radio frequency analysis and intermediate frequency amplifiers. Frequency response stage gain, distortion, noise characteristics and frequency stability will be explored. Prerequisites: ELN 312, MA 303. Credit 12

ELN 316 Transistor Applications

Transistor circuitry and design problems. Junction diodes, transistor triodes, tunnel and zener diodes with associated circuitry. Temperature variation, transit time, and frequency response are studied in detail. Prerequisites: ELN 313, MA 304. Credit 7

ELN 317 Communications and Ultra High Frequency

Application of previously studied circuits to the broad field of communications and ultra high frequency. Amplitude and frequency modulated transmitters, receivers, wave guides, cavity resonators, klystron, magnetron and traveling wave tubes are discussed. Prerequisite: ELN 313. Credit 4

ELN 318 Special Circuitry

The design and analysis of special circuitry: wave shaping, pulse techniques, broad-band amplifiers, diode switches, multivibrators, gates, magnetic amplifiers, chopper amplifiers, clipper and clamping circuits, synchro and servo systems, phot control devices, step counters and other specific application circuitry. Prerequisites: ELN 314, ELN 316. Credit 7

ELN 319 Instrumentation

A basic study of sensory devices for detecting changes in pressure, temperatures, sound, light and electricity; the associated circuitry and indicating devices. Prerequisites: ELN 316, ELN 318. Credit 8

ELN 320 Circuit Analysis and Maintenance

Systematic analysis of complex circuitry. Methods of locating and correcting malfunctions. Troubleshooting by voltage measurements; resistance measurements, and waveform observations. Schematic reading and interpretation. Prerequisites: ELN 319, MA 304, PHY 304. Credit 8

ENGLISH

ENG 101 Reading Improvement

A concentrated effort to improve the student's ability to comprehend what he reads by training him to read more rapidly and accurately. Special machines are used for class drill to broaden the snap of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units. Reading faults of the individual are analyzed for improvement, and principles of vocabulary building are stressed. Prerequisite: None. Credit 2

ENG 102 Communication Skills

Development of ability to communicate effectively through the medium of good language usage in speaking and writing. Organizing thoughts, and presenting thoughts effectively in connection with problems. Prerequisite: None. Credit 2

ENG 301 Communicative Skills: Reading Improvement

A concentrated effort to improve the student's ability to comprehend what he reads by training him to read more rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units. Reading faults of the individual are analyzed for improvement, and principles of vocabulary building are stressed. Prerequisite: None. Credit 2

ENG 302 Communicative Skills: English

Designed to aid the student in the improvement of self-expression in business and technical composition. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None. Credit 3

ENG 303 Communicative Skills: Technical Writing

The fundamentals of English are utilized as a background for the organization and techniques of modern technical writing. Exercises in developing typical technical reports, using writing techniques and graphic devices, are completed by the students. Practical application in the preparation of a full-length technical report is required of each student at the end of the term. Prerequisite: ENG 302. Credit 3

ENG 304 Communicative Skills: Speech

Technical speech to develop the speaking skills with emphasis on the dual role of communications as both a speaking and listening skill. Stress is placed on growth in poise and confidence of the student. Practice through individual speeches and group discussion. Records are made of the student's voice and used as an aid in speech development. Prerequisite: ENG 302. Credit 2

ENG 305 Communicative Skills: Report Writing

A study and practice in the fundamentals of report writing, including style and mechanics in preparing reports of various types, which are most likely to be used by people engaged in business and the professions. Prerequisite: ENG 302. Credit 3

ENG 306 Communicative Skills: Business Communications

Develops skills in techniques in writing business communications. Emphasis is placed on writing action—getting sales letters and prospect uses. Business reports, summaries of business conferences, spot announcements for radio and television as well as letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiry are also included in their course. Prerequisite: ENG 305. Credit 3

ENG 307 Communicative Skills: Oral Communications

Includes study in areas of face-to-face conversation, delegating and accepting, understanding, listening, questioning, conferences, and the use of words. Prerequisite: BUS 306. Credit 3

INDUSTRIAL SCIENCE

ISc 301 Industrial Organization and Management

Organizational structure for industrial management; operational and financial activities, including accounting, budgeting, banking, credit and industrial risk, forecasting of markets, selection and layout of physical facilities; selection, training and supervision of personnel as found in typical industrial organizations. Prerequisite: None. Credit 3

MATHEMATICS

MA 120 Fundamentals of Mathematics

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth. Prerequisite: None. Credit 5

MA 301 Technical Mathematics

The real number system is developed as an extension of natural numbers, integers, and rational numbers. Insight into the processes of arithmetic and algebra is provided. Additional topics include sets, equations, number bases, number lines, coordinate systems, trigonometry of the right triangle, vectors, dimensional analysis, and the derivative. Prerequisite: None. Credit 5

MA 302 Technical Mathematics

Algebraic operations are applied to linear, quadritic, and polynomial functions and special equations of second degree. Complex numbers are introduced and the study of the derivative is continued. Selected applications involving rates of change, maxima and minima, approximation, areas, and volumes are considered. Prerequisite: MA 301. Credit 5

MA 303 Technical Mathematics

Ideas of algebra are used in a study of trigonometric, logarithmic and exponential functions. Selected applications of calculus reinforce this approach. Polar coordinates are introduced and their applications expanded. Complex numbers, vectors, coordinate systems and their applications constitute other areas of study. Prerequisite: MA 302. Credit 5

MA 304 Technical Mathematics

A further study of analytical geometry, algebra, and calculus; the binomial expansion, arithmetic and geometric progressions, polynomial functions and methods of solution, integration techniques and use of integral tables, polar equations, and an introduction to solid analytical geometry. Prerequisite: MA 303. Credit 3

MA 310 Business Mathematics

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business. Prerequisite: None. Credit 3

MASONRY

MAS 111 Bricklaying I

The history of the bricklaying industry. Clay and shell brick, mortar, laying foundations, laying bricks to a line, bonding, and tools and their uses. Laboratory work will be practical application of bricklaying. Prerequisite: None. Credit 8

MAS 112 Bricklaying II

Designed to give the student practical applications in mortar for walls, chimneys, foundations, expansion strips, wall ties, caulking, cutting limestone, starting of bonds, construction of arches, and cavity wall construction. Prerequisites: MAS 111, DD 121. Credit 8

MAS 113 General Masonry

Designed to assist the student in acquiring increased speed as well as accuracy. Students are encouraged to develop themselves to the highest production standards. Prerequisites: MAS 111 and MAS 112.

MAS 114 Estimating

Estimating concrete walls, concrete floors, concrete stairs, concrete walks, septic tank, wood lathe and lathing, plaster, stucco, rubble stone, adhesive terra cotta and quantities of modular masonry units. Prerequisite: None. Credit 5

MAS 115 Special Masonry Problems

Layout and erection of reinforced grouted brick masonry lintels, story pole and batter boards, fireplaces, glazed tile, panels, decorative stone, granite, marble, adhesive terra cotta and modular walls with modular windows. Prerequisite: None. Credit 9

MECHANICS

MECH 112 Welding

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver-soldering, and flame cutting methods applicable to mechanical repair work. Prerequisite: None. Credit 1

MECH 301 Materials, Tools and Processes

An overall view of the methods and procedures used to transform raw materials into finished products. Characteristics of metals, woods, and plastics and how these characteristics affect the selection and use of materials and methods of production in the manufacture of an object. Unit production system, sand casting, forging and allied processes, welding, sheet metal working processes, and woodworkng processes constitute areas of study. Prerequisite: None. Credit 3

MECH 302 Materials, Tools and Processes

Study of manufacturing processes involving machining of materials. The operation of lathes, grinders, drills, milling machines, shapers, planers, metal sawing machines, broaching machines, gear cutting machines, and finishing machines. Dimensional control and precision measuring as applied to machining of materials. Prerequisite: MECH 301. Credit 3

MECH 303 Materials, Tools and Processes

Mass-production methods, and design factors in areas of casting, forging, molding, pressing, drilling, boring, reaming, turning, grinding, milling, and surface finishing. Prerequisite: MECH 302. Credit 3

MECH 304 Metallurgy

Properties of metals and various methods of changing these properties, classifications of metals, powder metallurgy and factures contributing to production and selection of metals for use. Prerequisite: None. Credit 4

MECH 305 Strength of Materials

Study of principles and analysis of stresses which occur within machines and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analysis of these stresses are made as applied to thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components. Prerequisites: PHY 303, MA 303. Credit 4

PHYSICS

PHY 104 Applied Physics I

Introductory physics and its applications. Systems of measurement, theory of matter, properties of solids, liquids, and gases. Prerequisite: None. Credit 2

PHY 105 Applied Physics II

Basic principles of electricity, types of electricity, and its production, transmission, and transformation. Such factors as the electron theory, electrical measurement, magnetism, electromagnetism, and the magnetic effects of electricity constitute major areas of study. Prerequisite: PHY 104. Credit 2

PHY 106 Applied Physics III

Physical principles of force, energy, work and power; equilibrium and the laws of motion; principles of machines, mechanical advantage, and transmission of power in practical applications and the use of vectors and graphical presentations. Prerequisites: PHY 104, MA 120. Credit 2

PHY 301 Physics: Properties of Matter

The fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course. Prerequisite: None. Credit 4

PHY 302 Physics: Work, Energy, Power

Major areas covered in this course are work, energy and power. Instruction includes such topics as statistics, forces, center of gravity and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas. Prerequisites: PHY 301, MA 301. Credit 4

PHY 303 Physics: Electricity

Basis theories of electricity, types of electricity, methods of production, and transmission and transforming of electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resistance, horsepower, wattage, and transformers are major parts of this course. Prerequisites: PHY 301, MA 302. Credit 4

PHY 304 Physics: Light and Sound

A study of sound and wave motion and its technical applications to industry and related fields. Light and illumination. Principles of optical instruments. Practical aspects are emphasized. Prerequisite: MA 301. Credit 4

PHY 305 Hydraulics and Pneumatics

The basic theories of hydraulics and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs. Prerequisite: PHY 302. Credit 4

PSYCHIATRIC NURSE'S AIDE

UNIT I: Introduction To Health Services

Introduces the student to modern concepts of health; to agencies responsible for health protection, care of the sick, and rehabilitation; and to the role of the attendant within the hospital organization and as a member of the nursing team.

UNIT II: Meeting Daily Physical Needs of Patients

Introduces the student to basic principles and specific procedures for carrying out nursing measures related to the patient's general cleanliness, grooming, oral hygiene, nutrition, sleep and rest, activity and elimination. Emphasis is given to the importance of the patient's environment, safety principles, and the role of the attendant in making observations of patients while meeting these physical needs.

UNIT III: Assisting With Problems Related To Patient's Need

Introduces the student to common problems related to daily physical needs of patients and the nursing measures for prevention and/or correction of such problems. Emphasis is on the basic principles underlying nursing techniques, specific procedures, and observing and reporting. Each student will have the opportunity to practice common procedures under supervision of the teacher as opportunities arise in the clinical area. The student will be encouraged to think in terms of prevention and correction of problems.

UNIT IV: Nursing Procedures

Introduces the student to aseptic techniques and specific nursing procedures related to therapeutics, maintaining patient records, observation of patient's condition, and carrying out of hospital policies in specific situations. Following classroom discussion of each procedure, students will have opportunities for practice in the classroom and/or clinical area as opportunities for practice in the classroom arise. Emphasis will be given to related principles of technique related to each procedure studied.

UNIT V: Procedures Related To Change in Patient Placement

Introduces the student to the procedures and hospital policies related to admission of patients, discharge of patients, absence from the hospital without permission, absence for home visitation, and transfer of patients from one hospital area to another. Emphasis is on responsibilities of the attendant in each situation, record-keeping required for each situation and possible effects of changing status on the patient.

UNIT VI: Meeting Mental and Emotional Needs of Patients

Introduces the student to some of the fundamentals of human behavior, common problems of adjustment, the adjustment mechanisms, and applications of knowledge of human behavior to personal living and to care of patients.

UNIT VII: Nursing Care of Psychiatric Patients

Introduces the student to common psychiatric conditions, to therapeutic principles, and to the role of the attendant in care of patients with various manifestations of mental or emotional illness.

UNIT VIII: Becoming A Hospital Employee

Promotes further understanding of the role of the aide, hospital policies and procedures, job relationships, procedures for applying for or resigning from a position, role of the attendant in the community, and various aspects of financial responsibility, especially in relation to taxation, and social security.

PRACTICAL NURSING

PN I Practical Nursing I

A course of study devoted to promoting the knowledge, and understandings, appreciations and beginning skills needed in Practical Nursing. Classroom and laboratory experiences are planned to be followed by related learning experiences in the clinical area.

PN II Practical Nursing II

A course of study devoted to introducing the students to variations from normal body function to the nursing principles related to therapeutic methods and diagnostic procedures, and to the fundamentals of Medical-Surgical, Maternity and Nursing of Children. Classroom and Laboratory lessons are planned to be correlated or followed by related clinical experiences.

PN III Practical Nursing III

A continuation of Practical Nursing II designed to aid the student in developing further skills and understandings to meet the needs of the Medical-Surgical, maternity and pediatric nursing patients. Related clinical experience is provided and correlated with classroom lessons.

PN IV and V Practical Nursing IV and V

A continuation of PN II and PN III including classroom study, conferences and guided learning experiences in using concepts developed in previous courses to formulate and execute plans which help the patient and family solve problems arising from illness conditions. Also included in a study of the legal and ethical responsibilities of the Licensed Practical Nurse, as well as information which will help the student make an easier adjustment from the role of a student to that of the Graduate Licensed Practical Nurse.

PSYCHIATRIC NURSE'S AIDE

SOCIAL SCIENCE

SOC 101 Human Relations

Development of understanding of relationships to other persons through some of the basic principles of human psychology. The problems of the individual and his work situation are studed in relation to the established organization of modern business and industry and in relation to government practices and labor organization, with special emphasis on the operating responsibilities of good management. Prerequisite: None. Credit 2

SOC 103 Management Procedures

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations. Prerequisite: None. Credit 3

SOC 301 Human Relations

Principles of interpersonal relations including a consideration of motivation, feelings, emotions, and learning with reference to their applications to on-the-job situations; personal and group dynamics and self-adjustment. Prerequisite: None. Credit 2

SOC 302 Economics

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large. Prerequisite: None. Credit 3

SOC 304 Economics

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems. Prerequisite: SOC 302. Credit 3

SOC 310 Applied Psychology

This course stresses the procedures of building an efficient, enthusiastic business team and deals with the nature of the problems which arise in business organizations. The individual and his behavior are discussed, as well as the problems of influence and authority. Prerequisite: None. Credit 3

TECHNICAL SECRETARY

TS 131 Accounting

This course introduces the elements of accounting and accounting procedures. Practice sets are used to give the student practical application of bookkeeping practices. Credit 4

TS 132 Typing

The fundamentals of typing for billing and correspondence are covered so the assistant may act as receptionist-secretary to the dentist. Credit 3

WELDING

WELD 121 Welding

The various processes used for joining materials by welding are discussed. Lecture, demonstrations and practice cover the oxyacetylene and arc welding processes, filler metals used, gases, currents, weldability of metals. Instruction is given in the set-up and safe operation of oxyacetylene welding apparatus. Students prepare joints by both hand and machine cutting with the oxyacetylene torch. Prerequisite: None. Credit 2

AND A TIME FOR RELAXATION

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TO: WAYNE TECHNICAL INSTITUTE
POST OFFICE BOX 1259
GOLDSBORO, NORTH CAROLINA

Gentlemen:

After reading your catalogue, I would like to request the following information:

Check those needed—

☐ Please send me an application, as I wish to apply for entrance for the __ Fall __ Winter __ Spring __ Summer Quarter.

☐ I would like to visit the Institute on _____
(Day) (Date)
at _____ a.m., p.m. Please let me know if the time is convenient.
(Time)

(NOTE: The office is not open on Saturday or Sunday—special appointments can be arranged).

☐ Please send information concerning rooms for students in Goldsboro.

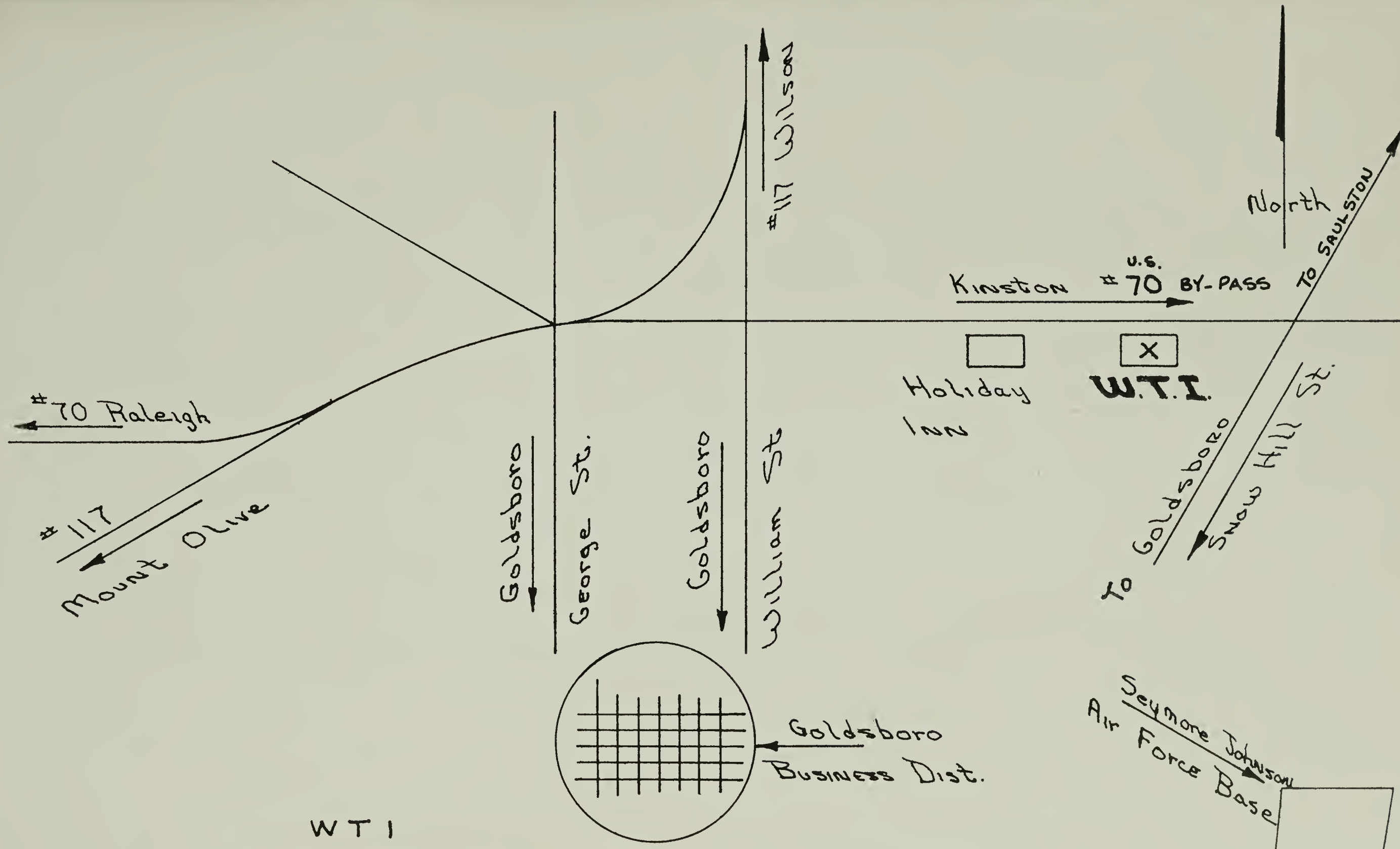
MY NAME IS: _____

Address: _____

High School: _____

County _____State _____

I am interested in studying _____



WTI
LOCATION MAP

Wayne Technical Institute
Post Office Box 1259
Goldsboro, N. C.